Environmental Options Group, Inc.

ARPRO / ASBESTOS / LEAD DIVISION
AMERICAN INTERNATIONAL HAZ MAT / HAZARDOUS WASTE DIVISION
INFECTIOUS WASTE / NARCOTICS / BIOLOGICAL DIVISION

April 9, 2001

18 Water Street/Tuckerton

Reading, Pennsylvania 19605

Ph.: 610-929-2883 800-992-7776 FAX: 610-929-5388 www.eog99.com

Mr. Dave Hancock Baldwin Hardware Corp. P.O. Box 15048 Reading PA 19612

Dear Mr. Hancock:

Enclosed you will find a revised Supplemental Asbestos Inspection Report documenting the location, quantity and composition of asbestos containing materials. Per your request we have changed the quantity section to reflect the actual amount of fittings present.

Should you have any questions, please do not he sitate to contact me personally at 610-929-2883.

Respectfully

William J. Steingraber Jr.

enclosure

SUPPLEMENTAL ASBESTOS INSPECTION REPORT FOR SELECT DEMOLITION

Project Location:

Baldwin Hardware Administration and Concept Buildings 841 E. Wyomissing Blvd. Reading, PA 19612

Prepared for:

Mr. Dave Kancock Baldwin Kardware P.O. Box 15048 Reading, PA 19612 Prepared by:
Environmental Options Group, Inc.
18 Water Street/Tuckerton
Reading, PA 19605
(610) 929-2883 Fax (610) 929-5388

Environmental Options Group Inc. (EOG) was contracted to perform additional sampling and quantification of material to supplement an original building inspection performed by Karl & Associates in March 1996.

The purpose of the additional sampling was requested by Mr. Dave Hancock, representative of the owner Baldwin Brass, Reading, PA. The inspection and sampling was in the Administration Building 1st, 2nd, 3rd Floors and the Concept Building only.

On January 27, 2001 a two-member team from EOG and a three-member team from Crystal Environmental Services (CES) met at the location with Mr. David Hancock at 7:00 AM.

The team of six discussed future renovation concerns and prepared the random sample plan for the effected areas. Mr. Anthony Santarelli from EOG lead team #1 consisting of Paul Kerr and Tom Kostes of CES to the 3rd floor. Mr. William Steingraber from EOG and Alan Feinberg (CES) of team #2 proceeded to sample and quantify all suspect material which will be disturbed during the future renovations. Team #1 completed its inspection and proceeded to the 1st floor inspection. Mr. Hancock provided access to all but one area. Although the area was inaccessible, Mr. Steingraber and Mr. Feinberg were able to make observations from the opposite side of the office in question. Mr. Hancock divided his activities between the two teams. The teams completed the Administration Building at approximately 11:30 AM and met in the reception area.

Mr. Hancock and both teams then proceeded to the Concept Center. The teams made an initial walk through of the facility and discussed concerns they had with the initial inspection. The team decided that additional samples of the floor material be extracted based on amounts reported for tile and mastic previously, but that a stop order be placed after the 1st positives.

Team #1 inspected and quantified the floor area while team #2 made above ceiling inspection. Team #2 discovered two water heaters. One above the ceiling in the N.W. end of the building. Special note is being made as well as a 2nd ceiling system which consisted of sheetrock material.

Team #2 extracted samples of the ceiling system to ensure no asbestos was contained. Team #2 also found that the fire suppression system in the N.W.corner of the building running north to south had fiberglass jacket insulation with several additional asbestos containing fittings.

Please refer to the attached spreadsheets as well as the report from Karl & Associates dated March 1996 for any abatement or renovation activities prior to the commencement of work.

SAMPLE LOCATION, CONDITION, RECOMMENDATION AND QUANTIFICATION

\sbestos Survey

Project: Renovation Baldwin Hardware Administration and Concept Buildings 841 E. Wyomissing Boulevard Reading, PA 19612 PA Certified Inspectors: P. Kerr (011486); A. Feinberg (006978) W. Steingraber (004138); A. Santarelli (018917) Inspection Date, EOG Team: January 27, 2001 Page

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A	Sample Location	Sample Type			Company of the second	er Laboratories	2	Risk Assessmen	t
Area/ Ref #	20 11	or Description	Date Collected	Sample Number	% Asbestos	Type of Asbestos	Quantity	Risk	Recommendation
dminis	tration Building			55 8					
3rd Fibor #1	At Door to Vic Carder's Office 9x9 Spline Ceiling Tile	White, Fibrous	01/27/01 (625)	BHAB-3-CT01	None	Not Applicable	None	None	None
3rd Floor #2	Corner Copy Room 9x9 Spline Ceiling Tile	White, Fibrous	01/27/01 (625)	BHAB-3-CT02	None	Not Applicable	None	None	None
3rd Floor #3	Conference Room (Loose Tile) 9x9 Spline Ceiling Tile	White, Fibrous	01/27/01 (625)	внав-3-стоз	None	Not Applicable	None	None	None
3rd Floor #4	Decorative Wall Covering Main (Center) Stair Tower	White Granular	01/27/01 (625)	BHAB-3-STC01	None	Not Applicable	None	None	None
3rd Floor #5	Black Fittings - Above Ceilings President/Secretary Office Ceiling	Black Bituminous	Assumed**	Assumed	22%	Chrysotile	4 Fittings (3 Est.)	Dry Covering Non Friable, Low Risk	Remove Prior to Renovation
3rd Floor #6	White Fitting Above President's Office Ceiling	White Fibrous	01/27/01 (627)	BHAB-3-F01	2% & 3%	Chrysotile Amosite	11 Fittings	Dry & Delaminating Friable, Moderate Risk	Remove Prior to
3rd Floor	White Fittings - In Walls & Above Ceilings - President/Secretary Offices	White Fibrous	Assumed	See F01	2% & 3%	Chrysotile Amosite	12 Fittings (Est.)	Unknown Friable, Moderate Risk	Remove Prior to
3rd Floor #6	Delaminating Fittings Above President's Office Ceiling	White Fibrous	Assumed (627)	See BHAB-3-F01	2% & 3%	Chrysotile Amosite	30 SF	Dry & Delaminating Friable, High Risk	Clean Up, as soon as possible
3rd Floor #7	Spackle & Tape - Wall between President/ Secretary Offices	Cream, Granular Cream, Fibrous	01/27/01 (627)	BHAB-3-DWT01-06, L1 BHAB-3-DWT01-06, L2	3%	Chrysotile	See Below	See Below	See Below
		Point Count Analysis	01/27/01 (628)	BHAB-3-DWT01-06, L1	2.75%	Chrysotile	12 SF	Behind Paneling Friable, Low Risk	Remove Prior to Renovation
3rd Floor #8	White Plaster/ Gray Coat Hall Wall/Sharon Arnold's Office	Brown Coat - Gray Plaster - White Dry Wall - Off White	01/27/01 (627)	BHAB-3-PL01, L1 BHAB-3-PL01, L2 BHAB-3-PL01, L3	None None None	Not Applicable	None	None	None
3rd Floor #9	White Plaster/Gray Coat Hall Wall/John Meyers' Office	Brown Coat - Gray Plaster - White Dry Wall - Off White	01/27/01 (627)	BHAB-3-PL02, L1 BHAB-3-PL02, L2 BHAB-3-PL02, L3	None None None	Not Applicable	None	None	None
3rd Floor #10	White Plaster/Gray Coat Hall Wall/End of Hall Office	Brown Coat - Gray Plaster - White Dry Wall - Off White	01/27/01 (627)	BHAB-3-PL03, L1 BHAB-3-PL03, L2 BHAB-3-PL03, L3	None None None	Not Applicable	None	None	None
3rd Floor #11	White Plaster/Gray Coat Hall Wall/Severin Fayerman's Office	Brown Coat - Gray Plaster - White	01/27/01 (627)	BHAB-3-PL04, L1 BHAB-3-PL04, L2	None None	Not Applicable	None	None	None
3rd Floor #12	White Plaster/Gray Coat Hall Wall/Office Adjacent To Stairs	Brown Coat - Gray Plaster - White	01/27/01 (627)	BHAB-3-PL05, L1 BHAB-3-PL05, L2	None None	Not Applicable	None	None	None
2nd Floor #13	Decorative Wall Covering Main (Center) Stair Tower	White, Granular	01/27/01 (625)	BHAB-2-STC02	None	Not Applicable	None	None	None
2nd Floor #14	Dry Wall/Spackle/Paper Tape Hall	White, Powdery White, Granular Belge, Fibrous	01/27/01 (627)	BHAB-2-DWT01-01, L1 BHAB-2-DWT01-01, L2 BHAB-2-DWT01-01, L3	None None None	Not Applicable	None	None	None
nd Floor #15	Dry Wall Hall Off Lobby	White, Powdery White, Granular	01/27/01 (627)	BHAB-2-DWT01-02	None None	Not Applicable	None	None	None
#16	Dry Wall/Spackle/Paper Tape J. Key Office	White, Powdery White, Granular Beige, Fibrous	01/27/01 (627)	BHAB-2-DWT01-03, L1 BHAB-2-DWT01-03, L2 BHAB-2-DWT01-03, L3	None None None	Not Applicable	None	None	None
#17	Dry Wall/Spackle/Paper Tape E. Beatty Office	White, Powdery White, Granular Beige, Fibrous	01/27/01 (627)	BHAB-2-DWT01-04, L1 BHAB-2-DWT01-04, L2 BHAB-2-DWT01-04, L3	None None	Not Applicable	None	None	None

Asbestos Survey

Project: Renovation Baldwin Hardware Administration and Concept Buildings 841 E. Wyomissing Boulevard Reading, PA 19612 PA Certified Inspectors: P. Kerr (011486); A. Feinberg (006978)
W. Steingraber (004138); A. Santarelli (018917)
Inspection Date, EOG Team: January 27, 2001
Page 2 of 3

	Sample Location	Sample Type	5			r Laboratories		Risk Assessment	
Area/ Ref #	N 4 1	or Description	Date Collected	Sample Number	% Asbestos	Type of Asbestos	Quantity	Risk	Recommendation
2nd Floor #18	Linoleum Mail Room	Orgalnically Bound	Assumed**	Assumed	30%	Chrysotile	600 SF	Encapsulated with wax. Non Friable, if undisturbed	Protect/Remove During renovation
2nd Floor #19	Black Fittings - Above Ceilings Throughout Floor	Black Bituminous	Assumed**	Assumed	22%	Chrysotile	22 Fittings	Dry Covering Non Friable, Low Risk	Remove Prior to Renovation
2nd Floor	Black Fittings - In Inaccessible Spaces	Black Bituminous	Assumed**	Assumed	22%	Chrysotile	25 Fittings (Est.)	Unknown Non Friable, Low Risk	Remove Prior to Renovation
2nd Floor #20	White Fittings - Above Ceilings & Visibly in Walls - Throughout Floor	White Fibrous	Assumed	See - BHAB-3-F01	2% & 3%	Chrysotile Amosite	366 Fittings	Dry & Some Delaminating Friable, Moderate Risk	Remove Prior to Renovation
2nd Floor	White Fittings - In Inaccessible Spaces	White Fibrous	Assumed	See - BHAB-3-F01	2% & 3%	Chrysotile Amosite	25 Fittings (Est.)	Unknown Friable, Moderate Risk	Remove Prior to Renovation
2nd Floor #21	Dry Wall/Spackle In Ceiling - Mail Room	White, Powdery White, Granular	01/27/01 (627)	BHAB-2-DWT01-05, L1 BHAB-2-DWT01-05, L2	None None	Not Applicable	None	None	None
2nd Floor #22	Dry Wall/Spackle J. Meguire Office	White, Powdery White, Granular	01/27/01 (627)	BHAB-2-DWT01-07, L1 BHAB-2-DWT01-07, L2	None None	Not Applicable	None	None	None
2nd Floor #15	Dry Wall/Spackle Under DWT01-02	Off White, Powdery White, Granular	01/27/01 (627)	BHAB-2-DWT02-01, L1 BHAB-2-DWT02-01, L2	None None	Not Applicable	None	None	None
2nd Floor #17	Dry Wall Under DWT01-04	Off White, Powdery	01/27/01 (627)	BHAB-2-DWT02-02	None	Not Applicable	None	None	None
2nd Floor #21	Dry Wall Under DWT01-05	White, Powdery	01/27/01 (627)	BHAB-2-DWT02-03	None	Not Applicable	None	None	None
2nd Floor #23	White Fitting In Ceiling - Lobby Area	White, Powdery, Fibrous		BHAB-2-FI01	None	Not Applicable	None	None	None
2nd Floor #24	Plaster Wall, between O. Garcia/B. Nagel Offices	Beige, Granular White, Granular	01/27/01 (627)	BHAB-2-PL01, L1 BHAB-2-PL01, L2	None None	Not Applicable	None	None	None
	5 1 10 10 10								1.5
1st Floor #25	Decorative Wall Covering Main (Center) Stair Tower	White Granular	01/27/01 (625)	BHAB-1-STC03	None	Not Applicable	None	None	None
1st Floor #26	Geiling Plaster Brown Coat Break Room	White Granular	01/27/01 (627)	BHAB-1-CPL01	None	Not Applicable	None	None	None
1st Floor #27	Linoleum First Aid Room	Orgainically Bound	Assumed**	Assumed	25%	Chrysotile	200 SF	Encapsulated with wax. Non Friable, if undisturbed	Protect/Remove During renovation
1st Floor #28	Floor Tile, Beneath non asbestos tile Lunch Room/Cafe	Orgainically Bound	Assumed**	Assumed	2%	Chrysotile	720 SF	Encapsulated with wax. Non Friable, if undisturbed	Protect/Remove During renovation
1st Floor #29	Black Fittings - Above Ceilings Men's Bathroom & Lunch Room	Black Bituminous	Assumed**	Assumed	22%	Chrysotile	39 Fittings	Dry Covering Non Friable, Low Risk	Remove Prior to Renovation
1st Floor #29	Black Fittings - Above Ceilings Vomen's Bathroom/Inaccessible Chase		Assumed**	Assumed	22%	Chrysotile	10 Fittings (Est.)	Unknown Non Friable, Low Risk	Remove Prior to
1st Floor #30	White Fittings in Mechanical Portion Parts Department	White Granular	01/27/01 (627)	BHAB-1-F02	40%	Chrysotile	153 Fittings	Dry & Cracking Friable, Moderate-High Risk	Remove Prior to
1st Floor #29	White Fittings in Ceilings Above Men's Room & Lunch Room	White Granular	Assumed	See F02	40%	Chrysotile	57 Fittings	Dry & Cracking Friable, Moderate-High Risk	Remove Prior to Renovation
	White Fittings in Ceilings Vomen's Bathroom/Inaccessible Chase		Assumed	See F02	40%	Chrysotile	40 Fittings (Est.)	Unknown Friable, Moderate-High Risk	Remove Prior to
1st Floor #31	White Fitting in Mechanical Portion Parts Department	White Granular	01/27/01 (627)	BHAB-1-F03	None	Not Applicable	None	None	None
1st Floor #32	White Fitting in Mechanical Portion Parts Department	White Granular	01/27/01 (627)	BHAB-1-F04	None	Not Applicable	None	None	None

Asbestos Survey

Project: Renovation
Baldwin Hardware
Administration and Concept Buildings

841 E. Wyomissing Boulevard Reading, PA 19612 PA Certified Inspectors: P. Kerr (011486); A. Felnberg (006978)
W. Steingraber (004138); A. Santarelli (018917)
Inspection Date, EOG Team; January 27, 2001
Page 3 of 3

Risk Assessment Schneider Laboratories Sample Location Sample Type or Description Date Sample Type of Quantity Area/ Number Asbestos Risk Recommendation Ref# Collected Asbestos Concept Building 01/27/01 BHCB-1-CT01 Not Applicable Beige, Fibrous None None None Slotted Ceiling Tile None Main #33 Men's Rest Room (626)Slotted Ceiling Tile Beige, Fibrous 01/27/01 BHCB-1-CT02 None Not Applicable None None None Main #34 Men's Rest Room (626)Slotted Ceiling Tile Beige, Fibrous 01/27/01 BHCB-1-CT03 None Not Applicable None None None Main #35 Men's Rest Room (626)Slotted Ceiling Tile Beige, Fibrous 01/27/01 BHCB-1-CT04 None Not Applicable None None None Main #36 End Office (626)High Ceiling Tile 01/27/01 BHCB-CT04 Not Applicable Main Beige, Fibrous None None None None #37 (626)01/27/01 BHCB-CT05 Main High Ceiling Tile Beige, Fibrous None Not Applicable None None None #3B (626)High Ceiling Tile Beige, Fibrous 01/27/01 BHCB-CT06 None Not Applicable None None None Main #39 (626)White, Powdery /Fibrous 01/27/01 Dry Wall Ceiling Panels BHCB-DWC01 None Not Applicable None None None Main #40 (626)BHCB-DWC02 Dry Wall Ceiling Panels White, Powdery/Fibrous 01/27/01 Not Applicable None None None None Main #41 (626)White, Powdery/Fibrous 01/27/01 Dry Wall Ceiling Panels BHCB-DWC03 None Not Applicable None None None Main #42 (626)White, Orgainically Bound Assumed** 7% Chrysotile 5,000 SF Encapsulated with wax. Protect/Remove White 9x9 Grav/Black Speckled Assumed Main #43 Black Mastic Black, Bituminous Non Friable, if undisturbed During renovation Black Floor Trim Black, Organically Bound 01/27/01 BHCB-2-FT20 10% Chrysotile 4 SF Encapsulated with wax. Protect/Remove Main #44 Exterior Entrys/Stair Landing Trim (626)Non Friable, if undisturbed During renovation White 12x12 Gray/Black Speckled White, Organically Bound 01/27/01 BHCB-1-FT01, L1 4% Chrysotile 15,000 SF Encapsulated with wax. Protect/Remove Main Black Mastic Black, Bituminous BHCB-1-FT01, L2 10% Chrysotile Non Friable, if undisturbed During renovation #45 (626)White 12x12 Gray/Black Speckled White, Organically Bound 01/27/01 BHCB-1-FT02, L1 Not Postive Stop See FT01 Positive Stop Positive Stop Main Black, Bituminous BHCB-1-FT02, L2 Positive Stop See FT01 Positive Stop Positive Stop #46 Black Mastic (628)Analyzed White, Organically Bound 01/27/01 BHCB-1-FT03, L1 White 12x12 Gray/Black Speckled Not Positive Stop See FT01 Positive Stop Positive Stop Main Black Mastic Black, Bituminous BHCB-1-FT03, L2 Positive Stop See FT01 Positive Stop #47 (626)Analyzed Positive Stop White 12x12 Grav/Black Speckled White, Organically Bound 01/27/01 BHCB-1-FT04, L1 See FT01 Positive Stop Main Not Positive Stop Positive Stop #48 Black Mastic Black, Bituminous (626)BHCB-1-FT04, L2 Analyzed Positive Stop See FT01 Positive Stop Positive Stop White 12x12 Gray/Black Speckled White, Organically Bound 01/27/01 BHCB-1-FT05, L1 See FT01 Positive Stop Main Not Positive Stop Positive Stop #49 Black Mastic Black, Bituminous (626)BHCB-1-FT05, L2 Analyzed Positive Stop See FT01 Positive Stop Positive Stop White, Organically Bound 01/27/01 BHCB-1-FT06, L1 White 12x12 Gray/Black Speckled See FT01 Positive Stop Main Not Positive Stop Positive Stop #50 Black, Bituminous (626)BHCB-1-FT06, L2 Positive Stop See FT01 Positive Stop Black Mastic Analyzed Positive Stop White, Organically Bound 01/27/01 BHCB-1-FT07, L1 See FT01 White 12x12 Gray/Black Speckled Not Positive Stop Positive Stop Positive Stop Malh #51 Black Mastic Black, Bituminous (626)BHCB-1-FT07, L2 Analyzed Positive Stop See FT01 Positive Stop Positive Stop White 12x12 Gray/Black Speckled White, Organically Bound 01/27/01 BHCB-1/2-FT08, L1 Not Positive Stop See FT01 Positive Stop Positive Stop Main #52 Black Mastic Black, Bituminous (626)BHOB-1/2-FT08, L2 Analyzed Positive Stop See FT01 Positive Stop Positive Stop White 12x12 Gray/Black Speckled White, Organically Bound 01/27/01 BHCB-2-FT09, L1 See FT01 Not Positive Stop Positive Stop Positive Stop Main Positive Stop #53 Black Mastic Black, Bituminous (626)BHCB-2-FT09, L2 Analyzed See FT01 Positive Stop Positive Stop White, Organically Bound 01/27/01 White 12x12 Gray/Black Speckled BHCB-2-FT10, L1 Not Positive Stop See FT01 Positive Stop Positive Stop Main #54 Black, Bituminous BHCB-2-FT10, L2 See FT01 Black Mastic (626)Analyzed Positive Stop Positive Stop Positive Stop White, Organically Bound 01/27/01 White 12x12 Grav/Black Speckled BHCB-1-FT11, L1 Not Positive Stop See FT01 Positive Stop Main Positive Stop #55 Black Mastic Black, Bituminous (626)BHCB-1-FT11, L2 Analyzed Positive Stop See FT01 Positive Stop Positive Stop

Asbestos Summary

Project: Renovation Baldwin Hardware

PA Certified Inspectors: P. Kerr (011486); A. Feinberg (006978) W. Steingraber (004138); A. Santarelli (018917) Inspection Date, EOG Team: January 27, 2001 Pa

Administration and Concept Buildings
Sample Location Page 1 of 2 Schneider Laboratories Risk Assessment

Area/ Ref #	Sample Location	Sample Number	Schneider % Asbestos	Laboratories Type of Asbestos	Quantity	Risk Assessment Risk	Recommendation
dministra	tion Building						
3rd Floor #5	Black Fittings - Above Ceilings President/Secretary Office Ceiling	Assumed	22%	Chrysotile	4 Fittings (3 Est.)	Dry Covering Non Friable, Low Risk	Remove Prior to Renovation
3rd Floor #6	White Fitting Above President's Office Ceiling	BHAB-3-F01	2% & 3%	Chrysotile Amosite	11 Fittings	Dry & Delaminating Friable, Moderate Risk	Remove Prior to Renovation
3rd Floor	White Fittings - In Walls & Above Ceilings - President/Secretary Offices	See F01	2% & 3%	Chrysotile Amosite	12 Fittings (Est.)	Unknown Friable, Moderate Risk	Remove Prior to Renovation
3rd Floor #6	Delaminating Fittings Above President's Office Ceiling	See BHAB-3-F01	2% & 3%	Chrysotile Amosite	30 SF	Dry & Delaminating Friable, High Risk	Clean Up, as soon as possible
3rd Floor #7	Spackle & Tape - Wall between President/ Secretary Offices	BHAB-3-DWT01-06, L1 BHAB-3-DWT01-06, L2	3% None	Chrysotile	See Below	See Below	See Below
2		BHAB-3-DWT01-06, L1	2.75%	Chrysotile	12 SF	Behind Paneling Friable, Low Risk	Remove Prior to Renovation
2nd Floor #18	Linoleum Mail Room	Assumed	30%	Chrysotile	600 SF	Encapsulated with wax. Non Friable, if undisturbed	Protect/Remove During renovation
2nd Floor #19	Black Fittings - Above Ceilings Throughout Floor	Assumed	22%	Chrysotile	22 Fittings	Dry Covering Non Friable, Low Risk	Remove Prior to Renovation
2nd Floor	Black Fittings - In Inaccessible Spaces	Assumed	22%	Chrysotile	25 Fittings (Est.)	Unknown Non Friable, Low Risk	Remove Prior to Renovation
2nd Floor #20	White Fittings - Above Ceilings & Visibly in Walls - Throughout Floor	See - BHAB-3-F01	2% & 3%	Chrysotile Amosite		Dry & Some Delaminating Friable, Moderate Risk	Remove Prior to Renovation
2nd Floor	White Fittings - In Inaccessible Spaces	See - BHAB-3-F01	2% & 3%	Chrysotile Amosite	25 Fittings (Est.)	Unknown Friable, Moderate Risk	Remove Prior to Renovation
1st Floor #27	Linoleum First Ald Room	Assumed	25%	Chrysotile	200 SF	Encapsulated with wax. Non Friable, if undisturbed	Protect/Remove During renovation
1st Floor #28	Floor Tile, Beneath non asbestos tile Lunch Room/Cafe	Assumed	2%	Chrysotile	720 SF	Encapsulated with wax. Non Friable, if undisturbed	Protect/Remove During renovation
1st Floor #29	Black Fittings - Above Ceilings Men's Bathroom & Lunch Room	Assumed	22%	Chrysotile	39 Fittings	Dry Covering Non Friable, Low Risk	Remove Prior to Renovation
1st Floor #29	Black Fittings - Above Ceilings Vomen's Bathroom/Inaccessible Chase		22%	Chrysotile	10 Fittings (Est.)	Unknown Non Friable, Ldw Risk	Remove Prior to Renovation
1st Floor #30	White Fittings in Mechanical Portion Parts Department	BHAB-1-F02	40%	Chrysotile		Friable, Moderate-High Risk	Remove Prior to Renovation
1st Floor #29	White Fittings in Ceilings Above Men's Room & Lunch Room	See F02	40%	Chrysotile	57 Fittings	Dry & Cracking Friable,Moderate-High Risk	Remove Prior to Renovation
1st Floor #29	White Fittings in Ceilings Vomen's Bathroom/Inaccessible Chase	See F02	40%	Chrysotile	40 Fittings (Est.)	Unknown Friable,Moderate-High Risk	Remove Prior to Renovation

Asbestos Summary

Project: Renovation
Baldwin Hardware
Administration and Concept Buildings

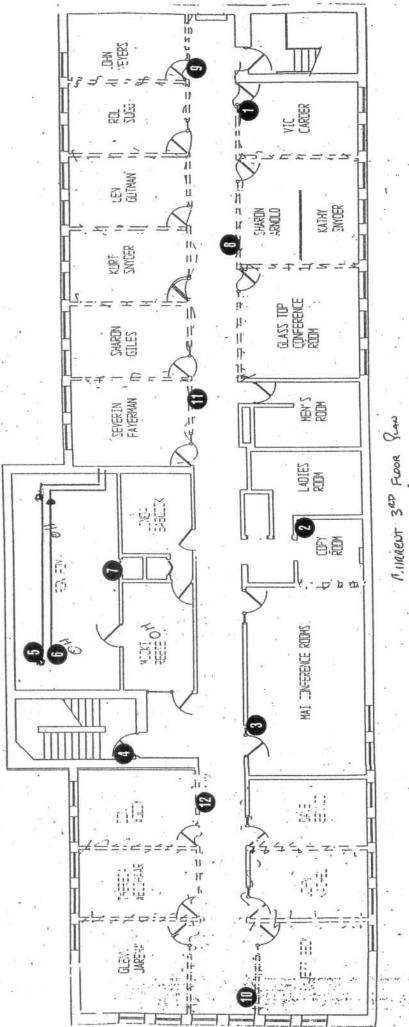
PA Certified Inspectors: P. Kerr (011486); A. Feinberg (006978) W. Steingraber (004138); A. Santarelji (018917) Inspection Date, EOG Team: January 27, 2001

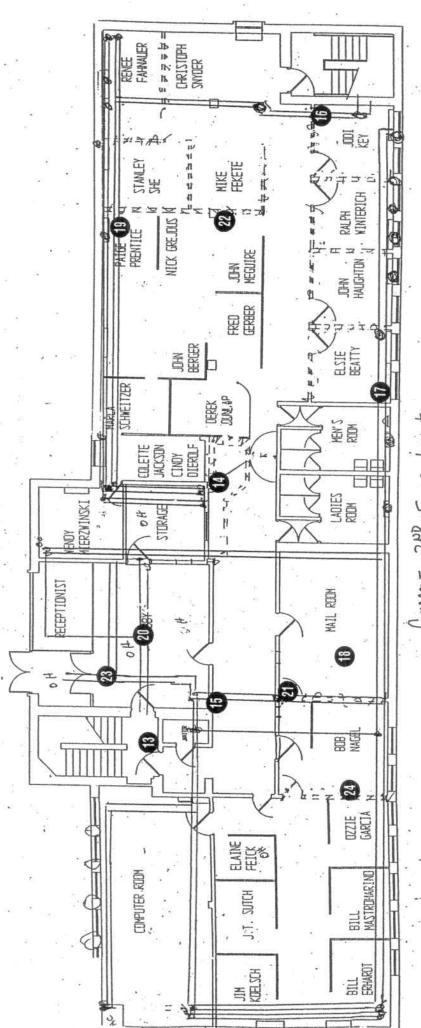
Page 2 of 2

	Sample Location	X .	Schneider	Schneider Laboratories		Risk Assessment	S. S
Area/ Ref #		Sample	% Asbestos	Type of Asbestos	Quantity	Risk	Recommendation
Concept Buildin	ilding						
Main	White 9x9 Gray/Black Speckled	Assumed	%2	Chrysotile	5,000 SF	Encapsulated with wax.	Protect/Remove
#43	Black Mastic					Non Friable, if undisturbed	During renovation
Main	Black Floor Trim	BHCB-2-FT20	40%	Chrysotile	4 SF	Encapsulated with wax.	Protect/Remove
#44	Exterior Entrys/Stair Landing Trim				*	Non Friable, if undisturbed	During renovation
Main	White 12x12 Gray/Black Speckled	BHCB-1-FT01, L1	4%	Chrysotile	15,000 SF	Encapsulated with wax.	Protect/Remove
#45	Black Mastic	BHCB-1-FT01, L2	10%	Chrysotile		Non Friable, if undisturbed	During renovation

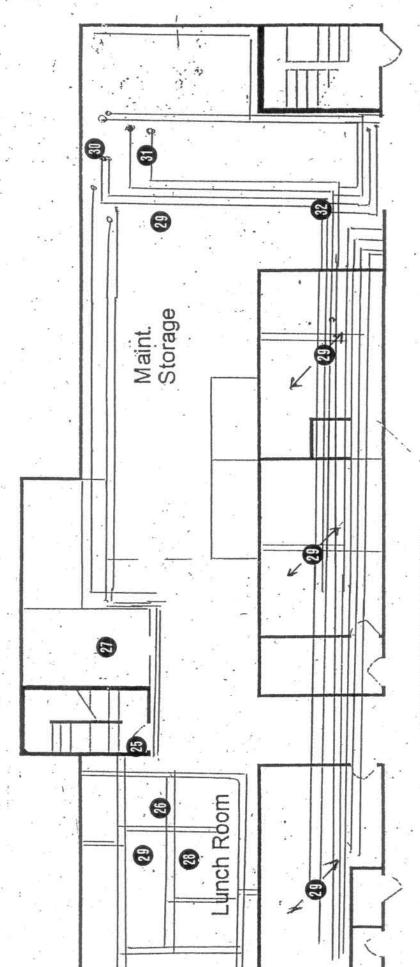
Assumed** - Based upon previous sampling, these materials are assumed to contain the asbestos content identified by others.

DRAWINGS

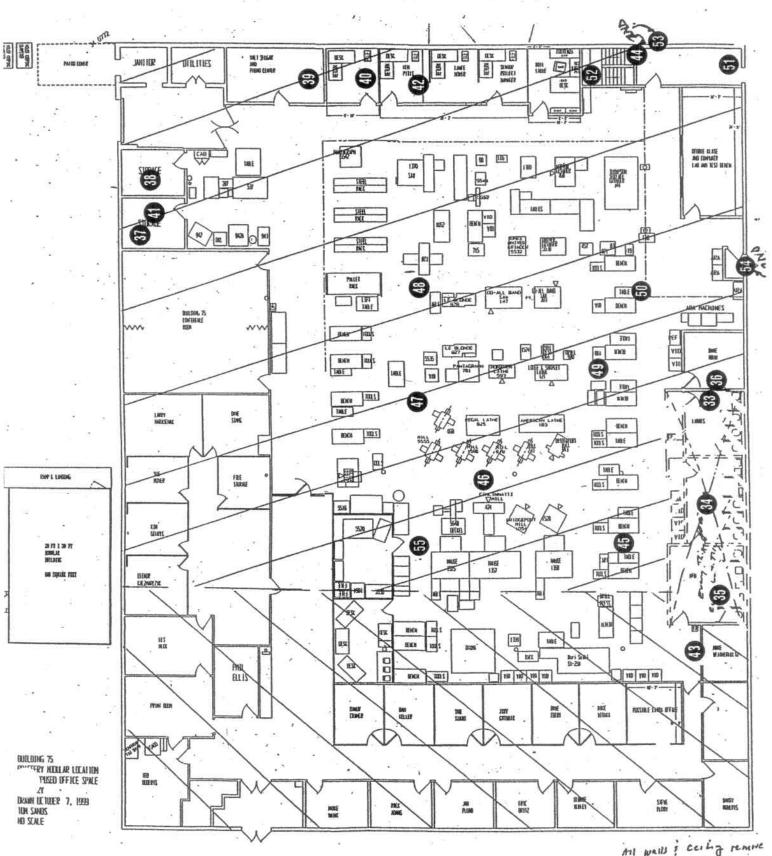




CURRENT 2ND FLOOR LAYOUT ABENINISMATION BUCK (208)



1ST FLOOR OFFICE



CURRENT BLOG 75

LABORATORY RESULTS

SCHNEIDER LABORATORIES

INCORPORATED

2512 W. Cary Street • Richmond, Virginia • 23220-5117 804-353-6778 · 800-785-LABS (5227) · (FAX) 804-353-6928

Excellence in Service and Technology AIHA 8936, ELLAP 8936, NVLAP 1150, NYELAP 11413, CAELAP 2078, NC 593, SC 93003

LABORATORY ANALYSIS REPORT

Asbestos Identification by EPA Method 600/R-93/116

ACCOUNT:

466-01-625

CLIENT:

CRYSTAL ENVIRONMENTAL SERVICES

ADDRESS:

805 LONGFIELD DRIVE BLUE BELL, PA 19422

PO NO .:

PROJECT NAME: PROJECT NO .:

Adm. Bldg. **BOG-78**

JOB LOCATION:

Baldwin Hardware

Client

SLI

Sample

Asbestos Sample Detected Description

Sample No.

Sample/ Layer ID Identification/ Layer Name

(Yes/No)

BHAB3-STC01

1846204

Stairtower wall

Layer 1:

Wall coating

No

White, Granular

DATE COLLECTED:

DATE RECEIVED:

DATE ANALYZED:

DATE REPORTED:

1/27/2001

1/29/2001

1/29/2001

1/29/2001

100% Non-Asbestos

NON FIBROUS MATERIAL 100%

UHAB2-STC02

1846205 Layer 1:

Stairtower wall

Wall coating

White, Granular No

100% Non-Asbestos

CELLULOSE FIBER 1%, NON FIBROUS MATERIAL 99%

BHAB1-STC03

1846206 Laver 1:

Stairtower wall

No

White, Granular

Wall coating 100% Non-Asbestos

NON FIBROUS MATERIAL 100%

BHAB3-CT01

1846207 Layer 1:

Ceiling tile

Ceiling tile

No

White, Fibrous

100% Non-Asbestos

MINERAL/GLASS WOOL 80%, NON FIBROUS MATERIAL 20%

BHAB3-CT02

1846208

Ceiling tile

Layer 1:

Ceiling tile

No

White Fibrous

100% Non-Asbestos

MINERAL/GLASS WOOL 80%, NON FIBROUS MATERIAL 20%

mples analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including interference by matrix components. Gravimetric reduction and correlative analyses are recommended for all non-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is a quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

ACCOUNT - WORKORDER: 466-01-625

Page 2 (Continued)

Client Sample

SLI Sample/ Layer ID Sample Identification/ Layer Name Asbestos Sample Detected Description (Yes/No)

Внавз-стоз

1846209

Ceiling tile

Layer 1: Ceiling tile 100% Non-Asbestos No White, Fibrous

MINERAL/GLASS WOOL 80%, NON FIBROUS MATERIAL 20%

NALYST: JEAN L. MAYES otal no. of pages in report =

REVIEWED BY

Katherine M. Charles, Analyst

a. Is analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including nterference by matrix components. Gravimetric reduction and correlative analyses are recommended for all on-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with he approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

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LABORATORY ANALYSIS REPORT

Asbestos Identification by EPA Method 600/R-93/116

ACCOUNT:

466-01-626

CLIENT:

CRYSTAL ENVIRONMENTAL SERVICES

ADDRESS:

805 LONGFIELD DRIVE

BLUE BELL, PA 19422

PO NO .:

PROJECT NAME: PROJECT NO .:

Concept Bldg. **BOG-78**

JOB LOCATION:

Baldwin Hardware

Client

No.

Sample

SLI

Sample Sample!

Layer ID

Identification/

Layer Name

Asbestos Sample

Detected Description

(Yes/No)

BHCB-1-CT01

1846226

Ceiling tile slotted

Layer 1:

Ceiling tile

No Beige, Fibrous

100% Non-Asbestos

CELLULOSE FIBER 10%, FDAMED GLASS 10%, MINERAL/GLASS

DATE COLLECTED:

DATE RECEIVED:

DATE ANALYZED:

DATE REPORTED:

1/27/2001

1/29/2001

1/29/2001

1/29/2001

WOOL 60%, NON FIBROUS MATERIAL 20%

BHCB-1-CT02

1846227

Ceiling tile slotted

Layer 1:

Ceiling tile

No Beige, Fibrous

100% Non-Asbestos

CELLULOSE FIBER 10%, FOAMED GLASS 10%, MINERAL/GLASS

WOOL 60%, NON FIBROUS MATERIAL 20%

BHCB-1-CT03

1846228

Ceiling tile slotted

Layer 1:

Ceiling tile

No

Beige, Fibrous

100% Non-Asbestos

CELLULOSE FIBER 10%, FOAMED GLASS 10%, MINERAL/GLASS

WOOL 60%, NON FIBROUS MATERIAL 20%

BHCB-1-CT04

1846229

Ceiling tile slotted

Layer 1:

. Ceiling lile

No

Beige, Hibrous

100% Non-Asbestos CELLULOSE FIBER 10%, FOAMED GLASS 10%, MINERAL/GLASS WOOL 60%, NON FIBROUS MATERIAL 20%

les analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including inconerence by matrix components. Gravimetric reduction and correlative analyses are recommended for all non-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is a quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

Client Sample No.	Sample/ I	Sample Identification/ Layer Name	Asbesto Detected (Yes/No	Desc	
ЬЈВ-СТ04			No		Fibrous MINERAL/GLASS WOOL 75%, NON FIBROUS
BHCB-CT05			No		Fibrous VINERAL/GLASS WOOL 75%, NON FIBROUS
BHCB-CT06			No		Fibrous VINERAL/GLASS WOOL 70%, NON FIBROUS
BHCB-DWC01		Orywall ceiling Oryall Boestos	No CELLULOSE FIBER		Powdery, Fibrous ON FIBROUS MATERIAL 85%
BHCB-DWC02		Orywall ceiling Orywall Sbestos	No CELLULOSE FIBER		Powdery, Fibrous ION FIBROUS MATERIAL 85%
F 3-DWC03		Orywall ceiling Orywall sbestos (No.	White, 15%, N	Powdery, Fibrous ON FIBROUS MATERIAL 85%
BHCB-2-FT20			Yes CHRYSOTILE 10% NON FIBROUS MA		Organically bound 90%
BHCB-1-FT01		- The state of the	Yes CHRYSOTILE 4% NON FIBROUS MA		Organically bound
	Layer 2: N 10% Asbesto 90% Non-Asb		Yes CHRYSOTILE 10% NON FIBROUS MA		Bituminous 90%

les analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including interference by matrix components. Gravimetric reduction and correlative analyses are recommended for all non-friable, organically bound materials. For callbrated visual estimate, 1% is the concentration at which there is a quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

Client Sample No	SLI Sample/ Layer ID	Sample Identification/ Layer Name	Asbestos Detected (Yes/No)			
Br d-1-FT02	1846249 Layer 1:	White FT/M Floor tile			8 8	
	Not analyz	red due to positive st	op instructions			
	Layer 2: Not analyz	Mastic zed due to positive st	op instructions			a
BHCB-1-FT03	1846250	White FT/M			* :	
	Layer 1:	Floor tile		· . i		
	Not analyz	zed due to positive st	op instructions			
	Layer 2:	Mastic		- 1	1. 1. 1.	eK
= e ⁵	1000 000	red due to positive st	op Instructions			p ² e
BHCB-1-FT04	1846251	White FT/M	***			
	Layer 1:	Floor tile		3 1		
	Not analyz	red due to positive st	op instructions		ř.	9
	Layer 2:	Mastic				
		red due to positive st	op instructions			
	VI-W-					; *
BHCB-1-FT05	1846252	White FT/M	0			
	Layer 1:	Floor tile			a 5	
	Not analyz	red due to positive sto	op instructions		9	
	Layer 2:	Mastic		1		
	Not analyz	ed due to positive sto	op instructions	. ;		
				1		
BHCB-1-FT06	1846253	White FT/M		1		
	Layer 1:	Floor tile				ž.
	Not analyz	sed due to positive sto	p instructions	• !		
	Layer 2:	Mastic	1 5			. * *.
	Not analyz	ed due to positive sto	p instructions		-	
BHCB-1-FT07	1846254	White FT/M		10	75. E	
	Layer 1:	Floor tile				
	NOT analyz	ed due to positive sto	op instructions			
20		Mastic	19 2 5			o ⁸ ∈
	Not analyz	ed due to positive sto	p instructions			
DI 100 40 TT4					· · · · · · · · · · · · · · · · · · ·	
BHCB-1/2-FT08	1846255	White FT/M	-72.7			
	Layer 1:	Floor tile	n inntmedier-			
	Not analyz	ed due to positive sto	ih instractions	•		**

S 'es analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including interierence by matrix components. Gravimetric reduction and correlative analyses are recommended for all non-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is a quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

ACCOUNT - WO	ORKORDER:	466-01-626							Page	4 (Conti	nued)
Client Sample Vo.	SLI Sample/ Layer ID	Sample Identification/ Layer Name	Asbestos Detected (Yes/No)		le iption				2		,
	Layer 2: Not analy:	Mastic zed due to positive st	op Instructions	5.	,	8	8 8		2		
3HCB-2-FT09	1846256 Layer 1:	White FT/M Floor tile	, ,	,	*						
		zed due to positive st	op instructions	5 .			÷	(3)	. 81	3	
	Layer 2: Not analyz	Mastic red due to positive st	op Instructions	s	B		Ü)				
HCB-2-FT10	1846257	White FT/M					£	-			
Ş	Layer 1: Not analyz	Floor tile red due to positive st	op instructions	ı	345		-				2
	Layer 2:	Mastic ted due to positive st	op instructions				•	.9	17.207	*	
HCB-1-FT11	1846258	White FT/M							·	1	
	Layer 1:	Floor tile	aa inntuuntla u					ä			
	Layer 2:	red due to positive st Mastic red due to positive st				2		x x ²			

NALYST: JEAN L. MAYES atal no. of pages in report =

REVIEWED BY

Katherine M. Charles, Analyst

analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including letterence by matrix components. Gravimetric reduction and correlative analyses are recommended for all in-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with a approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

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LABORATORY ANALYSIS REPORT

Asbestos Identification by EPA Method 600/R-93/116

ACCOUNT:

466-01-627

CLIENT:

CRYSTAL ENVIRONMENTAL SERVICES

ADDRESS:

805 LONGFIELD DRIVE

BLUE BELL, PA 19422

PO NO .:

PROJECT NAME: PROJECT NO .:

Adm. Bldg. **BOG-78**

JOB LOCATION:

Baldwin Hardware

Client Sample

No.

SLI Sample/ Sample

Asbestos Sample

Layer ID

Identification/ Layer Name

Detected Description

(Yes/No)

Bhab2fi-01

1846312

White fitting

Layer 1:

Powdery material

No

White, Powdery, Fibrous

100% Non-Asbestos

MINERAL/GLASS WOOL 40%, NON FIBROUS MATERIAL 60%

DATE COLLECTED:

DATE RECEIVED:

DATE ANALYZED:

DATE REPORTED:

1/27/2001

1/29/2001

1/29/2001

1/29/2001

BI.__Zpl01-01

1846313

Plaster wall

Layer 1:

Brown coat

No Beige, Granular

100% Non-Asbestos

CELLULOSE FIBER 2%, NON FIBROUS MATERIAL 98%

Layer 2:

Plaster

White, Granular

100% Non-Asbestos

NON FIBROUS MATERIAL 100%

Bhab2dwt01-01

1846314

DW/spackle/tape

Layer 1:

Drywall

No

White, Powdery

100% Non-Asbestos

CELLULOSE FIBER 10%, MINERAL/GLASS WOOL 5%, NON FIBROUS

MATERIAL 85%

Layer 2:

Spackle

White, Granular No

100% Non-Asbestos

CELLULOSE FIBER 2%, NON FIBROUS MATERIAL 98%

Layer 3:

Tape.

No

Beige, Fibrous

100% Non-Asbestos

CELLULOSE FIBER 90%, NON FIBROUS MATERIAL 10%

les analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including interrerence by matrix components. Gravimetric reduction and correlative analyses are recommended for all non-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is a quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

Client Sample No.	SLI Sample/ Layer ID	Sample Identification Layer Name	De		Samp Descr	
⊾ J2dwt01-02	1846315 Layer 1: 100% Non- No spackle	DW/spackie/ta Drywall Asbestos or tape found	- a x	No FIBER	Off-whi	te, Powdery ION FIBROUS MATERIAL 85%
Bhab2dwt01-03	1846316	DW/spackle/ta	De			
	Layer 1:	Drywall		No	White.	Powdery
	100% Non-					ION FIBROUS MATERIAL 80%
	Layer 2:	Spackle		No		Granular
	100% Non-		CELLULOSE	100		N FIBROUS MATERIAL 98%
	1 2.					
, se	Layer 3;	Таре		No		Fibrous
	100% Non-	Aspestos	CELLULOSE	FIBER	95,%, N	ON FIBROUS MATERIAL 5%
Bhab2dwt01-04	1846317	DW/spackle/ta	20			<u>:</u>
51100 5 011101 04	Layer 1:	Drywall	pe -	No	White I	Powdery
	100% Non-		CELLULOSE			INERAL/GLASS WOOL 5%, NON FIBROUS
			MATERIAL 8		1070, 10	MENADOLAGS WOOL 376, NON FIBROOK
	Layer 2:	Spackle		No	White, 0	: Granular
	100% Non-	Asbestos	CELLULOSE			N FIBROUS MATERIAL 98%
	Layer 3:	Tape			Beige, F	FIG. 1. Factor of the control of the
	100% Non-		CELLULOSE			ON FIBROUS MATERIAL 5%
-			Ta			
2dwt01-05 د	1846318	DW/spackle/tap	ре	22		
	Layer 1:	Drywall		No	White, F	owdery
	100% Non-		CELLULOSE	FIBER	15%, N	ON FIBROUS MATERIAL 85%
	No tape fou	ind				
	Layer 2:	Spackle		No	White. C	Granular
	100% Non-A		CELLULOSE			N FIBROUS MATERIAL 98%
3hab2dwt01-07	1846320	DW/spackle/tag	ne			-
o e entre en	Layer 1:	Drywall	-	No	White. F	pwdery
	100% Non-		CELLULOSE			ON FIBROUS MATERIAL 90%
. 9,	No tape fou	nd		ne New Teld 5)	1000 TOTAL 1981 12	
	Layer 2:	Spackle		No	White	Granular
	100% Non-A					N FIBROUS MATERIAL 98%
3hab2dwt02-01	1846321	D)Allong altia (ha				
2114DZUW(0Z-U	Layer 1:	DW/spackle/tag Drywall		No	Offwhite	e, Powdery
	100% Non-A	C 1000 1 100 100 100 100 100 100 100 100				ON FIBROUS MATERIAL 85%

ples analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including incorporate for the inherent limitations of light microscopy including incorporate by matrix components. Gravimetric reduction and correlative analyses are recommended for all non-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is a quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

Client Sample No.	SLI Sample Asbestos Sample Sample/ Identification/ Detected Description Layer ID Layer Name (Yes/No)
	Layer 2: Spackle No .White, Granular 100% Non-Asbestos NON FIBROUS MATERIAL 100%
Bhab2dwt02-02	1846322 DW/spackle/tape Layer 1: Drywall No Off-white, Powdery 100% Non-Asbestos CELLULOSE FIBER 15%, NON FIBROUS MATERIAL 85% No spackle or tape found
Bhab2dwt02-03	1846323 DW/spackle/tape Layer 1: Drywall No White, Powdery 100% Non-Asbestos CELLULOSE FIBER 10%, MINERAL/GLASS WOOL 5%, NON FIBROUS MATERIAL 85% No spackle or tape found
Bhab3dwt01-06	1846325 DW/spackle/tape Layer 1: Spackle Yes Cream, Granular 3% Asbestos CHRYSOTILE 3%
	97% Non-Asbestos CELLULOSE FIBER 2%, NON FIBROUS MATERIAL 95% No drywall found Layer 2: Tape No Cream, Fibrous 100% Non-Asbestos CELLULOSE FIBER 95%, NON FIBROUS MATERIAL 5%
Bh :pl-01	1846326 Ceiling plaster cafe Layer 1: Plaster No Beige, Granular 100% Non-Asbestos CELLULOSE FIBER 2%, NON FIBROUS MATERIAL 98%
Bhab3-f01	1846327 Fitting Layer 1: Powdery material Yes Off-white, Powdery, Fibrous 5% Asbestos AMOSITE 3%, CHRYSOTILE 2% 95% Non-Asbestos MINERAL/GLASS WOOL 40%, NON FIBROUS MATERIAL 55%
Bhab1-f02	1846328 Fitting Layer 1: Powdery material Yes Off-white, Powdery, Fibrous 40% Asbestos CHRYSOTILE 40% 60% Non-Asbestos NON FIBROUS MATERIAL 60%
Bhab1-f03	1846329 Fitting Layer 1: Powdery material No Off-white, Powdery, Fibrous 100% Non-Asbestos CELLULOSE FIBER 10%, MINERAL/GLASS WOOL 35%, NON FIBROUS MATERIAL 55%

Start as analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including interference by matrix components. Gravimetric reduction and correlative analyses are recommended for all non-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is a quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

Client Sample No.	SLI Sample/ Layer ID	Sample Identification Layer Name	1	Asbestos Detected (Yes/No)	Descr		8 2 1	e:	ge 4 (Continued
B) 1-f04	1846330 Layer 1: 100% Non-	Fitting Powdery mate Asbestos		No GLASS W	Off-whi	ite, Powde	ery, Fibrous FIBROUS MA	TERIAL	60%
			NI SV-SIV SCOR	, .					00 /0
Bhab3-pl01	1846331	Plaster & brow	n coat			1		-	-
	Layer 1: 100% Non-	Brown coat Asbestos	NON FIBR	No OUS MAT		Granular 100%	8 8		N 20 K
	Layer 2: 100% Non-	Plaster	NON FIBR	No OUR MAT		Granular			
		A3063103	NON FIBR	OUS MAI	EKIAL	100%			
	Layer 3:	Drywall		No		te, Powde		18	
.*	100% Non-	Asbestos	CELLULOS	SE FIBER	15%, N	ON FIBR	OUS MATERIA	AL 85%	18
Bhab3-pl02	1846332	Plaster & brow	n coat			i	· · · · · · · · · · · · · · · · · · ·		
(10)	Layer 1:	Brown coat		No	Gray, G	Franular			
	100% Non-	Asbestos	CELLULOS	E FIBER			US MATERIA	L 95%	
	Layer 2:	Plaster		No	White (Granular			
	100% Non-		NON FIBR					-	
	Layer 3:	Drywall		No	Off-whit	e, Powde	rv		
	100% Non-		CELLULOS				OUS MATERIA	AL 90%	
3hah3-pl03	1846333	Plaster & brow	n coat						
	Layer 1:	Brown coat		No	Gray, G	iranular			
	100% Non-/	Asbestos	CELLULOS	E FIBER			US MATERIAL	98%	
	Layer 2:	Plaster		No	White, 0	Granular	-		
	100% Non-	Asbestos	NON FIBRO	TAM QUC	ERIAL 1	100%		9	20.
	Layer 3:	Drywall		No	Off-whit	e, Powde	rv		
	100% Non-		CELLULOS				OUS MATERIA	AL 85%	∞ =
3hab3-pl04	1846334	Plaster & brow	n coat						
	Layer 1:	Brown coat			Gray, G		2470		
	100% Non-/	Asbestos	CELLULOS	E FIBER	2%, NO	N FIBRO	US MATERIAL	98%	¥
	Layer 2:	Plaster		No	White, C	3ranular		141	-
od B	100% Non-	Asbestos	NON FIBRO	DUS MAT	ERIAL 1	100%		1251	
3hab3-p05	1846335	Plaster & brown	n coat			:			
	Layer 1:	Brown coat	constant.	No	Gray, G	ranular			54
	100% Non-		CELLULOS				US MATERIAL	95%	

as analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including interrerence by matrix components. Gravimetric reduction and correlative analyses are recommended for all non-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is a quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

CCOUNT - WORKORDER: 466-01-627

Page 5 (Continued)

lient lample to.

SLI Sample/

Layer ID

Sample Identification/ Layer Name Asbestos Sample Detected Description

(Yes/No)

Layer 2: Plaster 100% Non-Asbestos

No White, Granular NON FIBROUS MATERIAL 100%

NALYST: KATHERINE M. CHARLES of the other of

REVIEWED BY

Jean L. Mayes, Analyst

s analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including ntenerence by matrix components. Gravimetric reduction and correlative analyses are recommended for all on-friable, organically bound materials. For calibrated visual estimate, 1% is the concentration at which there is quantitative uncertainty. This report relates only to the items tested, must not be reproduced except in full with ne approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

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LABORATORY ANALYSIS REPORT

Asbestos Identification by Polarized Light Microscopy with EPA Point Count

ACCOUNT:

466-01-628

CLIENT: ADDRESS: CRYSTAL ENVIRONMENTAL SERVICES

805 LONGFIELD DRIVE BLUE BELL, PA 19422

PO NO .:

PROJECT NAME:

Adm. Bldg. **BOG-78**

PROJECT NO .: JOB LOCATION:

Baldwin Hardware

Client

SLI Sample/ Sample

Asbestos Sample Detected Description

Sample No.

Layer ID

Identification/ Layer Name

(Yes/No)

Bhab3dwt01-06

1846712

DW/spackle/tape

Spackle Layer 1:

2.75% Asbestos

Homogenous, Cream, Granular Yes CHRYSOTILE 2.75%

97.25% Non-Asbestos

CELLULOSE FIBER 5.75%, NON FIBROUS MATERIAL 91.50%

ANALYST: KATHERINE M. CHARLES Total no. of pages in report = 1

Jean L. Mayes, Analyst

1/27/2001

1/30/2001

1/30/2001

1/30/2001

DATE COLLECTED:

DATE RECEIVED:

DATE ANALYZED:

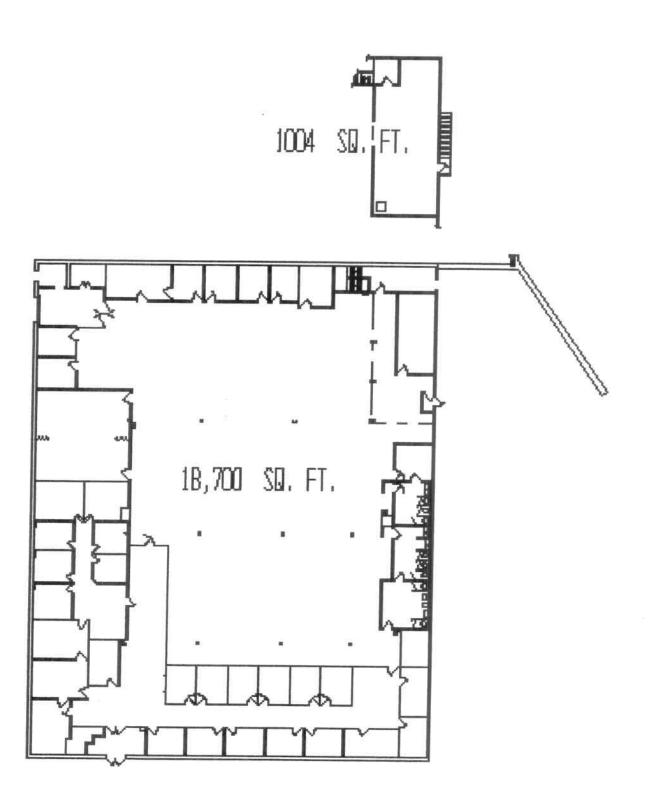
DATE REPORTED:

Jamples analyzed by the EPA Test Method are subject to the inherent limitations of light microscopy including interference by matrix components. A result below the reporting limit of 0.25% indicates that asbestos was found in the sample, but cannot be quantified by EPA Point Count methodology. This report relates only to the items tested, must not be reproduced except in full with the approval of the lab, and must not be used to claim NVLAP or other government agency endorsement.

ASBESTOS INSPECTION REPORT



BALDWIN HARDWARE 841 E. WYOMISSING BLVD. READING, PA 19612



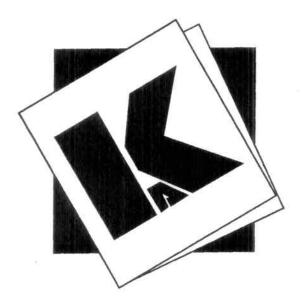
7 7 3

1

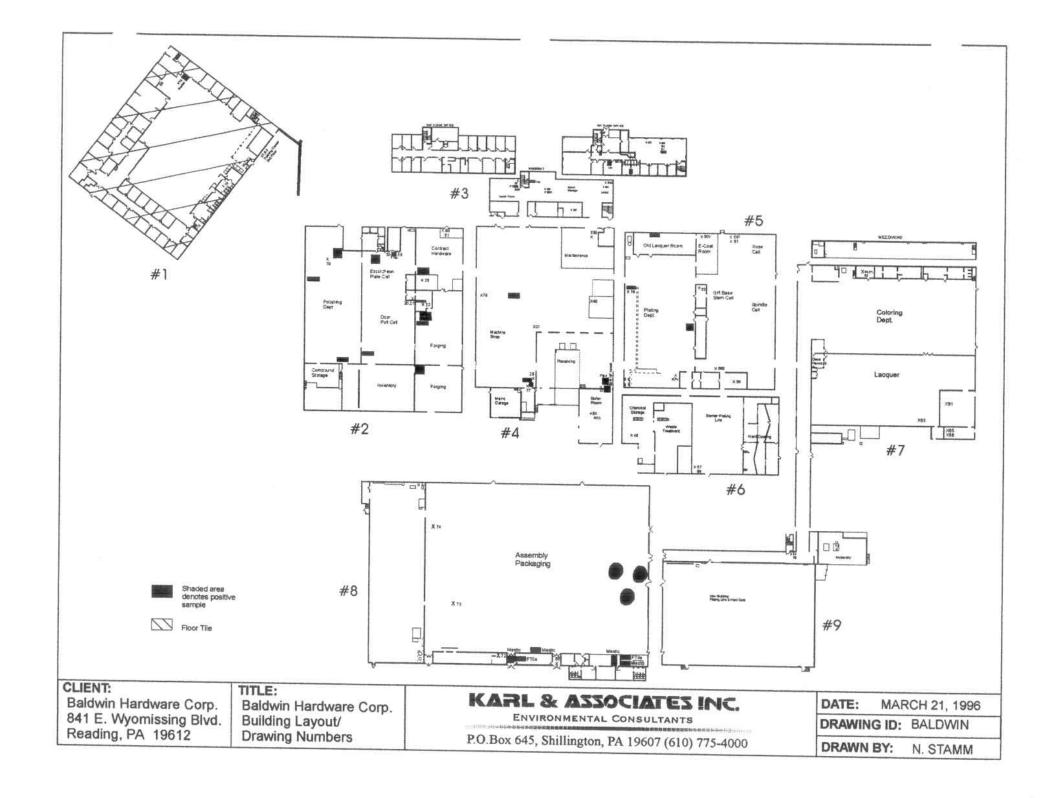
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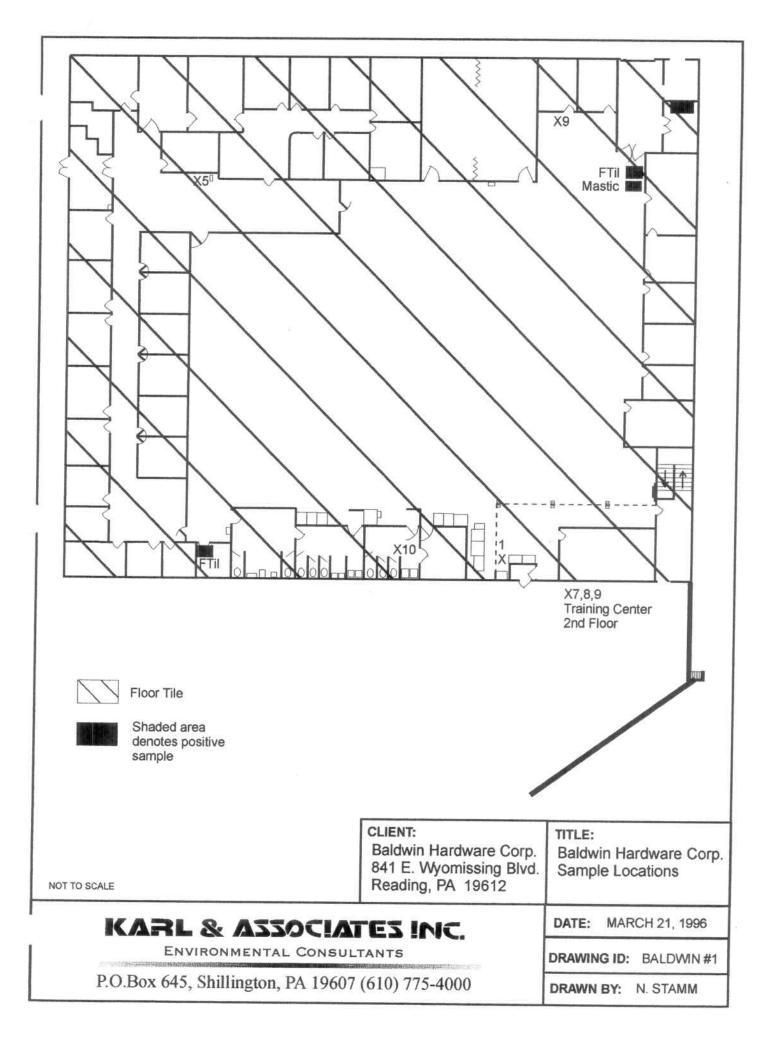
8

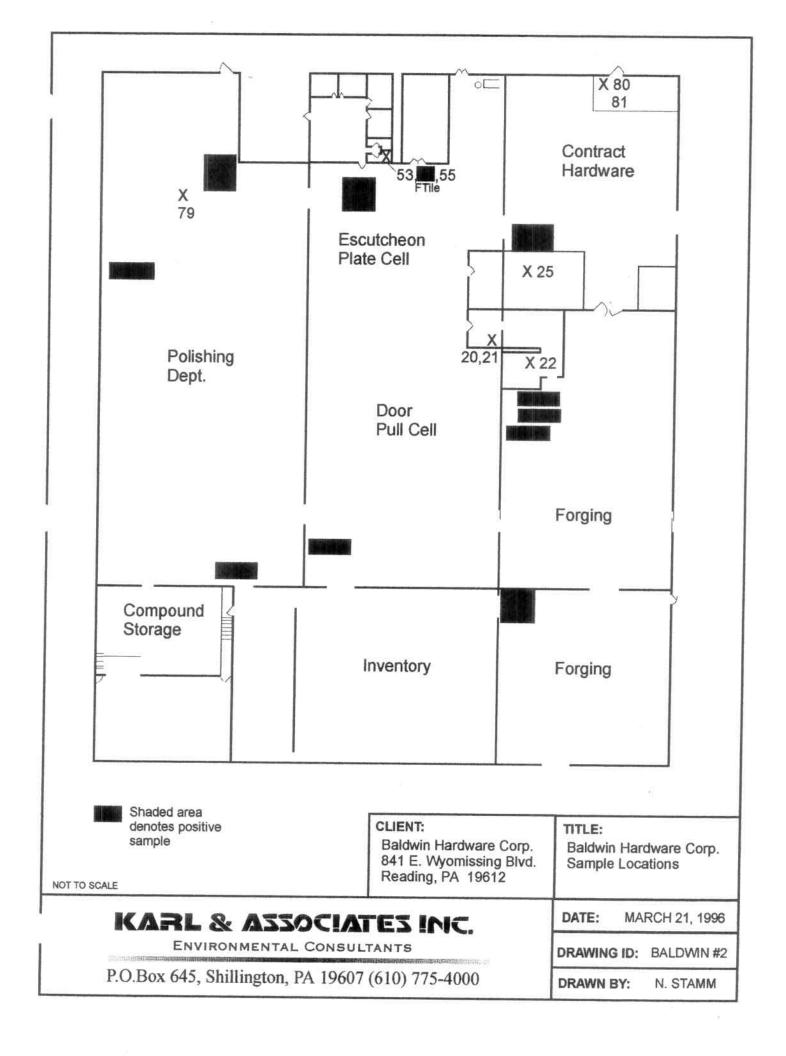
BUILDING 75

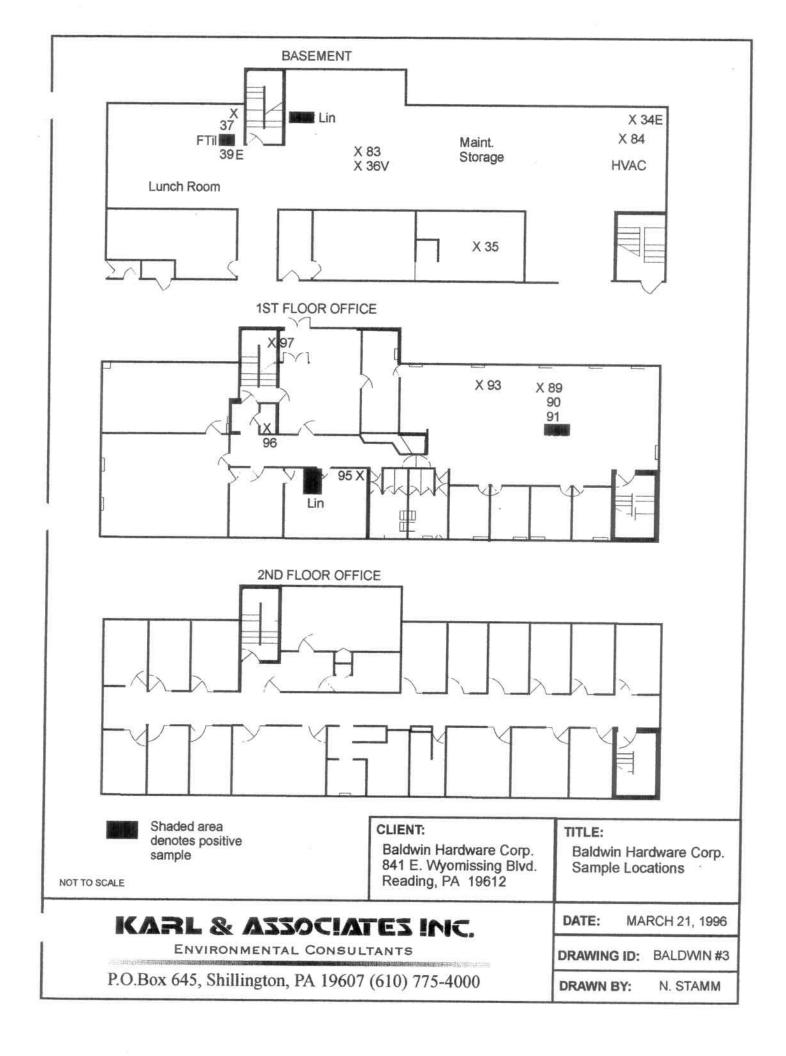


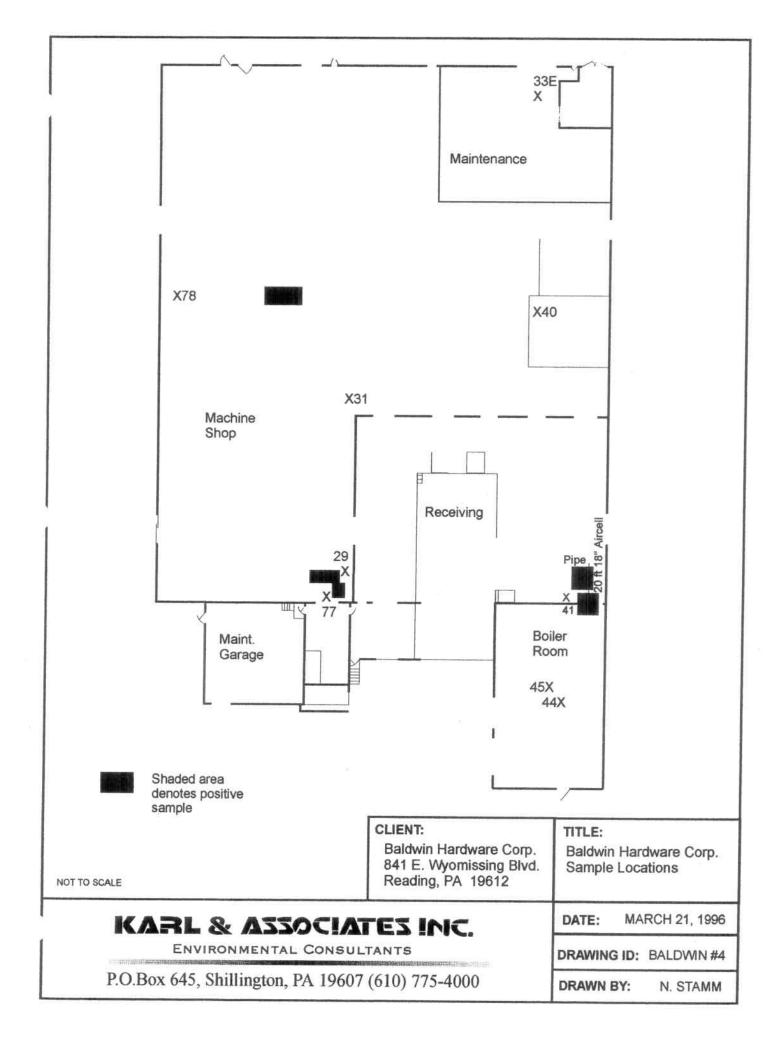
DRAWINGS

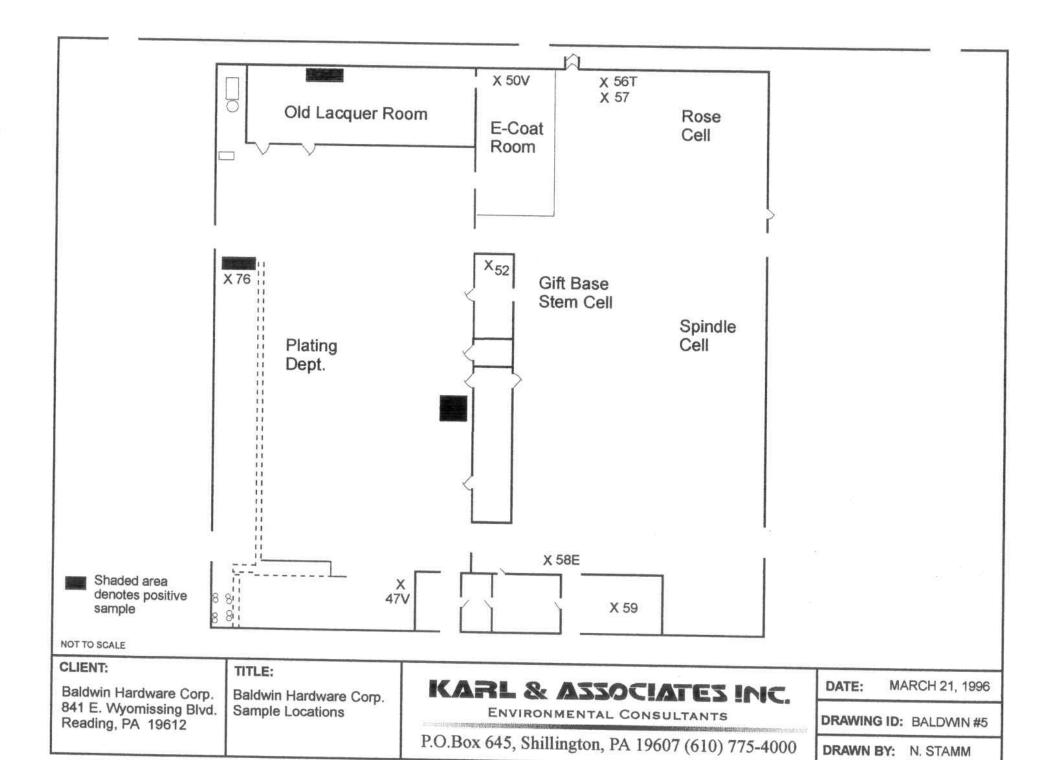


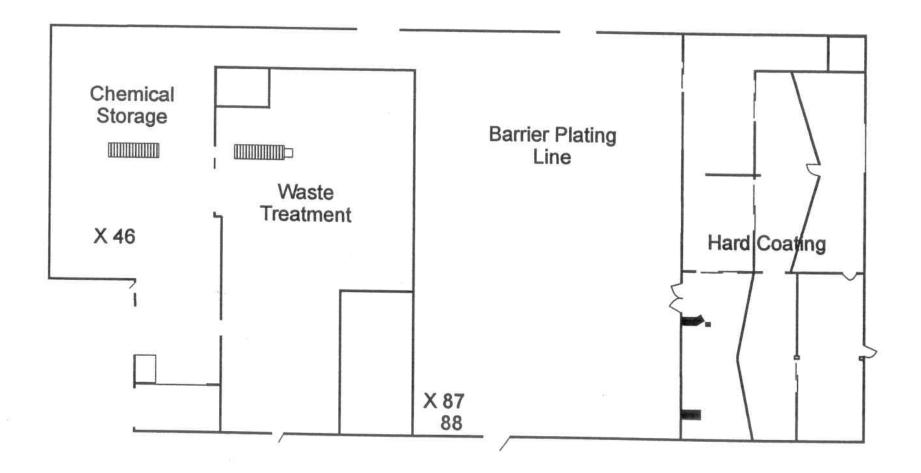












NOT TO SCALE

CLIENT:

Baldwin Hardware Corp. 841 E. Wyomissing Blvd. Reading, PA 19612

TITLE:

Baldwin Hardware Corp. Sample Locations

KARL & ASSOCIATES INC.

ENVIRONMENTAL CONSULTANTS

P.O.Box 645, Shillington, PA 19607 (610) 775-4000

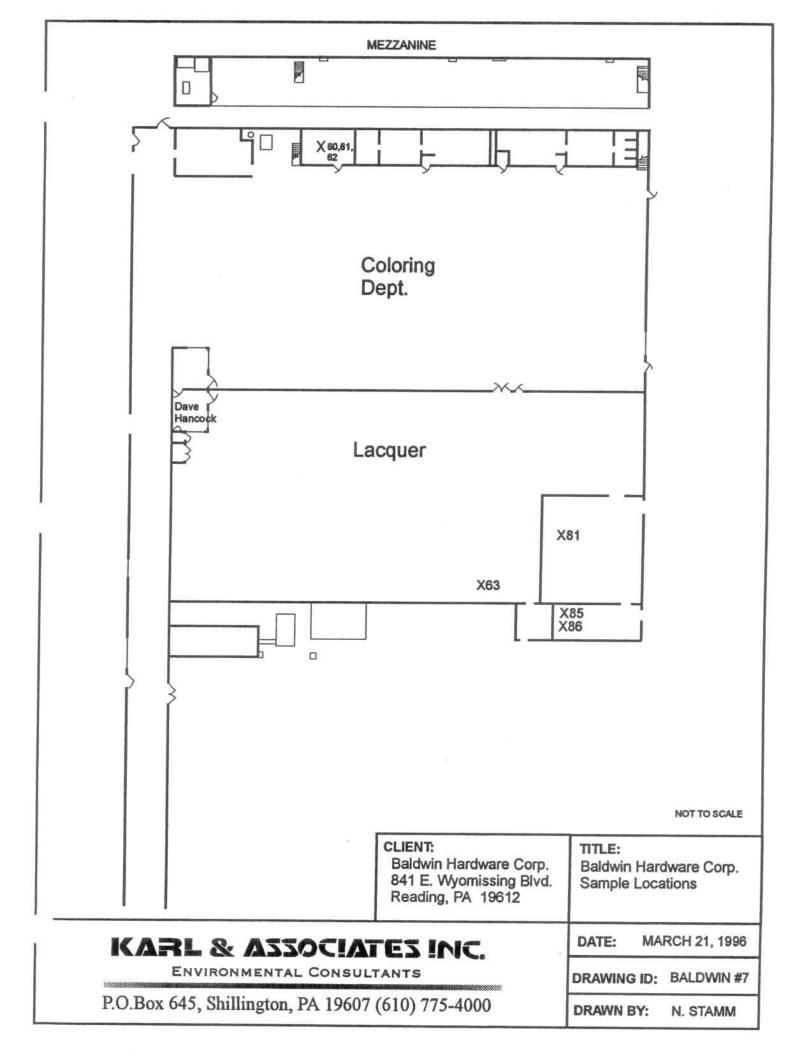
DATE:

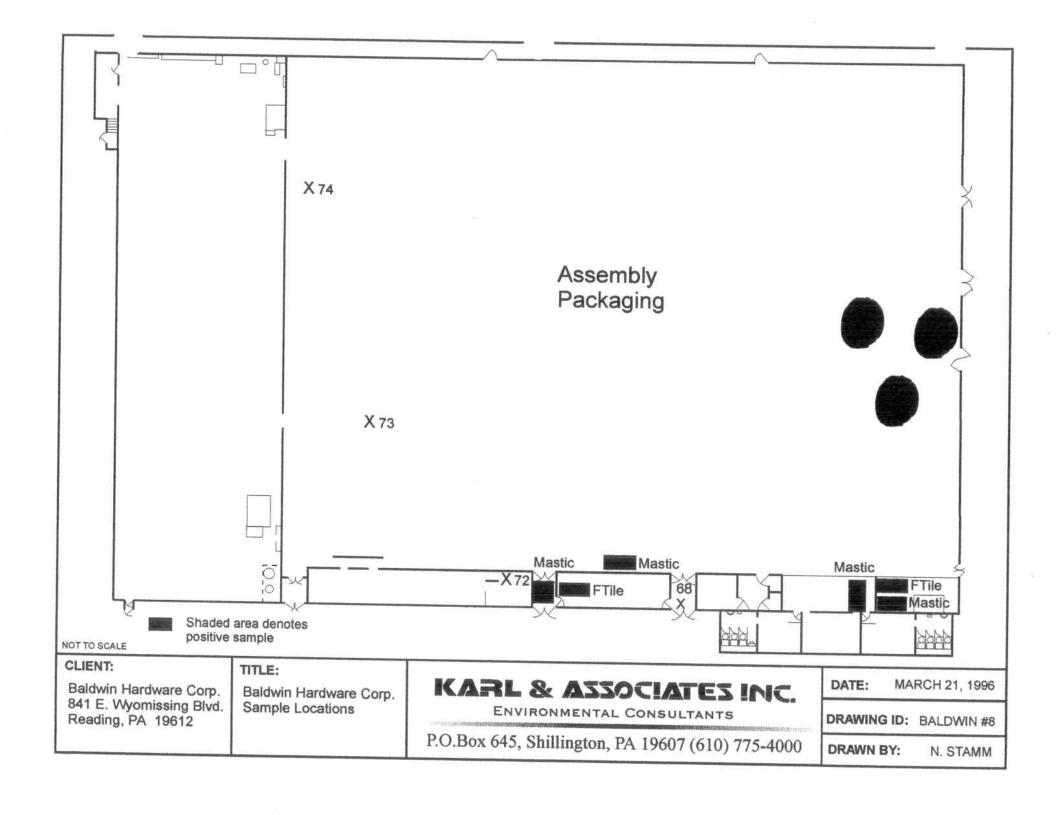
MARCH 21, 1996

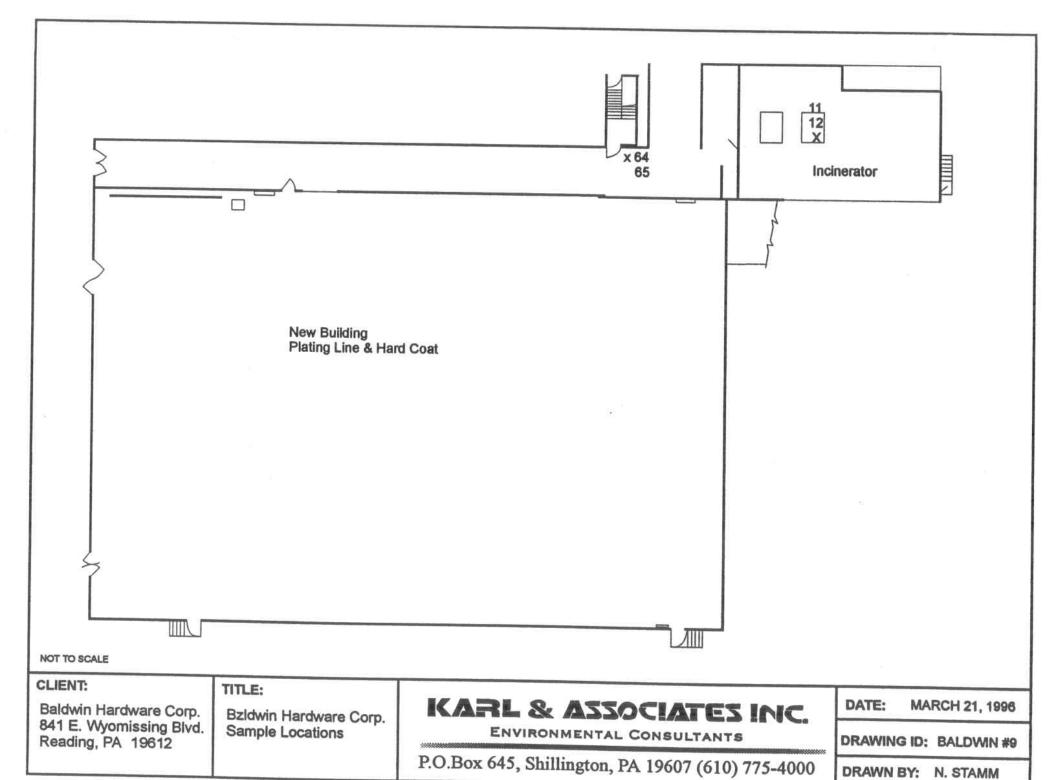
DRAWING ID: BALDWIN #8

DRAWN BY:

N. STAMM









WRITTEN REPORT

ENVIRONMENTAL CONSULTANTS
INDUSTRIAL HYGIENE CONSULTANTS



March 14, 1996

Baldwin Hardware Corporation P.O. Box 15048 841 E. Wyomissing Blvd. Reading, PA 19612 Air Quality Assessment
Industrial Hygiene Services
Waste Management & Disposal
Microbial Testing & Decontamination
Property Inspections • Site Assessments
Project Management, Planning, Design
Comprehensive Engineering Services
Asbestos • Tanks • Radon • Lead
Ventilation System Evaluation
Custom Training Programs

ASBESTOS INSPECTION REPORT

INTRODUCTION

Asbestos, derived from the Greek word meaning indestructible, is a generic term for a group of minerals which share fiber forming qualities. There are six forms of asbestos, each of which contain its own characteristics. The physical properties of asbestos were found to be useful as far back as biblical times but more recently in electrical, acoustical and thermal insulation and in products that resist fire, friction and chemicals.

With the increased use of asbestos, health problems directly related to asbestos exposure began to develop. Asbestos does not however cause immediate health problems but has a 'latency' period of 20 - 40 years before symptoms manifest themselves. Because of the adverse health effects associated with asbestos, President Reagan signed into law the EPA Asbestos Hazard Emergency Response Act (AHERA).

The AHERA laws, while pertaining only to schools have since become the industry guideline for asbestos inspections and the successful management of existing asbestos prior to its removal.

The purpose of the survey was to detail the location and condition of asbestos containing materials. A management plan will utilize the information gathered during the asbestos survey and give vital information including suggestions for record keeping procedures along with recommendations for responses that should be undertaken to ensure a safe working environment.

Page 1

Please review the management plan and inspection reports whenever contemplating renovations, improvements or demolitions to determine if any asbestos containing materials will be impacted by the work. Asbestos must be removed by licensed workers following strict government guidelines.

It is recommended that the facility contract with an abatement contractor capable of fast response to perform emergency asbestos related work. Maintenance workers must not be exposed to asbestos without proper training. Asbestos abatement is no longer recommended for in-house removal as the liability is too severe and all removal must now be done by state licensed workers. An additional requirement is that accredited project designers be involved with all abatement work.

TECHNICAL

On February 5th through 12th, 1996, Karl and Associates, Inc. conducted an asbestos inspection and bulk sample collection at the Baldwin Hardware Corporation. The asbestos inspection was in accordance with the proposal dated October 24, 1995. The inspection and sample collection was performed in accordance with EPA and OSHA regulations.

AHERA regulations allow inspectors to group certain building materials together into one homogeneous area for identification. Five (5) homogeneous areas were identified for the Concept Center and eight (8) areas for the Main Plant during the inspection. A total of 96 samples were collected from the various areas throughout the building that were suspect asbestos containing building materials. The samples were analyzed by Environmental Hazard Services laboratories, certification # 1882. The samples were analyzed by Polarized Light Microscopy (PLM), EPA method 600/R-93/116, to determine if any asbestos was present. The percentage and type of asbestos present was also identified.

Asbestos was identified in 33 of the 96 samples collected. The asbestos containing material was then classified into groups called a Homogenous areas. There were eight (8) homogenous areas identified that contained asbestos in the main manufacturing plant and five (5) homogenous areas identified in the Concept Center. The materials that contained asbestos in the Concept Center building were: Elbows-Valves-Tees, 9" floor tile, 12" floor tile, Mastic and roof materials. The materials that contained asbestos in the main manufacturing building were: Thermal Pipe Insulation, Elbows - Valves - Tees (EVTs), Floor Tile (Brown/Orange), 9"x 9" tan Floor Tile, Mastic, Floor Tile (tan w/ brown specs), Linoleum, and all types of roofing materials. The roof materials were not sampled, however it is very common to have asbestos in flashing, felt paper, tar, etc. and until sampling can prove otherwise, the roof must be assumed to contain asbestos. The type of asbestos identified was chrysotile asbestos. Chrysotile asbestos was the most common type of asbestos used in building materials.

Asbestos Inspection

Homogeneous Area

At the Baldwin Hardware Company plant in Reading, Karl and Associates personnel identified 5 types of building materials in the Concept Center and 9 types of building materials in the Main Building that we could classify together into definitive areas:

CONCEPT CENTER

BUILDING MATERIAL	HOMOGENEOUS IDENTIFICATION
EVT (elbow, valve, tee)	001
Mastic	002
9" X 9" Flr. Tile - White	003
12" X 12 Flr. Tile - White	004
Roof Building Materials	005

MAIN BUILDING

BUILDING MATERIAL	HOMOGENEOUS IDENTIFICATION
Pipe Insulation	001
EVT	002
Floor Tile - Brown/Orange	003
9" X 9" Flr. Tile - Tan	004
Mastic	005
9"X 9" Flr. Tile - Tan w/ brown specs	006
Linoleum	007
Roof Building Materials	008
Fire Doors	009

SAMPLE LOCATIONS AND I.D. NUMBERS

	CONCEPT CENTER	
I.D. Number	Location & Type	Result
Bald-2-5-001	Vending machine area - Ceiling Tile	NAD
Bald-2-5-002	1st Flr. Loading Dock - Floor Tile 12x12	5% Chrysotile
Bald-2-5-003	1st Flr. Loading Dock - Mastic	10 % Chrysotile
Bald-2-5-004	Office next to Mens Lav Flr. Tile 9x9	7 % Chrysotile
Bald-2-5-005	Copy machine area - Flr. Tile 12x12	NAD
Bald-2-5-006	Electrical Room - Elbow	5 % Chrysotile
Bald-2-5-007	Training Center - Flr. Tile 12x12	NAD
Bald-2-5-008	Training Center - Ceiling Tile	NAD
Bald-2-5-009	Storage Room - Dry Wall	NAD
Bald-2-5-010	Mens Lav - Tile Grout	NAD
	MAIN BUILDING	
Bald-2-6-011	Incinerator Room - Oven Insulation	NAD
Bald-2-6-012	Incinerator Room - Oven Insulation	NAD
Bald-2-8-013	Polishing Dept Elbow	85% Chrysotile
Bald-2-8-014	Polishing Dept Elbow	85% Chrysotile
Bald-2-8-015	Polishing Dept - Elbow	80% Chrysotile
Bald-2-8-017	Forging Dept Elbow	3% Chrysotile
Bald-2-8-018	Door Pull Cell Dept Elbow	90% Chrysotile
Bald-2-8-019	Escutchen Plate Cell - Tee	80 % Chrysotile
Bald-2-8-020	Escutchen Cell, mens lav - Flr. Tile 12x12	NAD
Bald-2-8-021	Escutchen Cell, mens lav Mastic	NAD
Bald-2-8-022	Escuthcen Cell,mens lav - Ceiling Tile	NAD
Bald-2-8-023	Contract Hardware - Elbow	80% Chrysotile

I.D. Number	Location & Type	Result
Bald-2-8-024	Contract Hardware - Tee	80% Chrysotile
Bald-2-8-025	Contract Hardware, office - Flr. Tile 12x12	NAD
Bald-2-8-026	Forging Dept., lunch area - Elbow	80% Chrysotile
Bald-2-8-027	Forging Dept, lunch area - Elbow	80% Chrysotile
Bald-2-8-028	Forging Dept, lunch area - Tee	80% Chrysotile
Bald-2-8-029	Machine Shop - Valve	NAD
Bald-2-8-030	Machine Shop - Elbow	90 % Chrysotile
Bald-2-8-031	Machine Shop - Elbow	NAD
Bald-2-8-032	Machine Shop - Elbow	85% Chrysotile
Bald-2-8-033	Machine Shop, Maint. Area - Elbow	NAD
Bald -2-8-034	HVAC, Maint Area - Elbow	NAD
Bald-2-8-035	Machine Shop, mens lav Plaster Ceiling	NAD
Bald-2-8-036	Hall next to 1st Aid Rm Valve	NAD
Bald-2-8-037	Machine Shop, lunch rm - Flr. Tile 12x12	NAD
Bald-2-8-038	Machine Shop, lunch rm Flr Tile-2nd layer	2 % Chrysotile
Bald-2-8-039	Machine Shop, lunch rm - Elbow	NAD
Bald-2-8-040	Machine Shop, offices - Ceiling Tile	NAD
Bald-2-8-041	Receiving - Elbow	NAD
Bald-2-8-042	Receiving - Valve	85 % Chrysotile
Bald-2-8-043	Receiving - Aircell Pipe Insulation	15 % Chrysotile
Bald-2-8-044	Boiler Room - Elbow	NAD
Bald-2-8-045	Boiler Room - Flue Breeching	NAD
Bald-2-8-046	Chemical Storage Rm Elbow	NAD
Bald-2-8-47	Plating Dept Valve	NAD
Bald-2-8-048	Plating Dept Tee	2 % Chrysotile

I. D. Number	Location & Type	Result
Bald-2-8-049	Old Laquer Rm - Elbow	80 % Chrysotile
Bald-2-8-050	E. Coat Rm - Valve	NAD
Bald-2-8-051	Plating Dept Elbow	80 % Chrysotile
Bald-2-8-052	Plating Dept, mens lav- plaster ceiling	NAD
Bald-2-8-053	Purchasing office, mens lav - Flr. tile 12x12	NAD
Bald-2-8-054	Purchasing office, mens lav - Flr. tile, 2nd layer	3 % Chrysotile
Bald-2-8-055	Purchasing office, mens lav - Ceiling tile 12x12	NAD
Bald-2-9-056	Polish Machine area - Tee	NAD
Bald-2-9-057	Polish Machine area - pipe insulation	NAD
Bald-2-9-058	Gift base/stemcell - Elbow	NAD
Bald-2-9-059	Gift base/stemcell, offices - Ceiling Tile	NAD
Bald-2-9-060	Lunch Room/Vending area - Flr tile 12x12	NAD
Bald-2-9-061	Lunch Room/Vending area - Ceiling Tile	NAD
Bald-2-9-062	Lunch Room/Vending area - Mastic	NAD
Bald-2-9-063	Lacquer Dept Pipe Insulation	NAD
Bald-2-9-064	Hall to Pack. & Assem Elbow	NAD
Bald-2-9-065	Hall to Pack. & Assem Pipe Insulation	NAD
Bald-2-9-066	HVAC Rm, Pack & Assem Flr tile 9x9	10 % Chrysotile
Bald-2-9-067	HVAC Rm, Pack & Assem Mastic	20% Chrysotile
Bald-2-9-068	Pack & Assem entrance - Flr. Tile 9x9	NAD
Bald-2-9-069	Pack & Assem, next to offices - mastic	15 % Chrysotile
Bald-2-9-070	Pack & Assem, offices/entrance - Flr. Tile 9x9	2 % Chrysotile
Bald-2-9-071	Pack & Assem., office/entrance - Mastic	15 % Chrysotile
Bald-2-9-072	Pack. & Assem., mens lav - Plaster Ceiling	NAD
Bald-2-9-073	Pack. & Assem Ceiling Tile	NAD

L D. Number	Location & Type	Result
Bald -2-9-074	Pack. & Assem Dry Wall	NAD
Bald-2-9-075	Pack. & Assem Flr. Tile 9x9	3 % Chrysotile
Bald-2-9-076	Plating Dept Pipe Insulation	NAD
Bald-2-9-077	Machine Shop - Pipe Insulation	NAD
Bald-2-9-078	Machine Shop - Pipe Insulation	NAD
Bald-2-9-079	Polishing Dept Pipe Insulation	NAD
Bald-2-9-080	Personnel Dept Offices - Flr. Tile 12x12	NAD
Bald-2-9-081	Personnel Dept Offices - Mastic	NAD
Bald-2-9-082	First Aid Room - Linoleum	25 % Chrysotile
Bald-2-9-083	Hall outside 1st Aid rm Pipe Insulation	NAD
Bald-2-9-084	HVAC Rm, Maint. area - Pipe Insulation	NAD
Bald-2-12-085	New Lacquer Rm, paint kitchen - Pipe Insulation	NAD
Bald-2-12-086	New Lacquer Rm, paint kitchen - Ceiling Tile	NAD
Bald-2-12-087	Barrier Plating Dept Elbow	NAD
Bald -2-12-088	Barrier Plating Dept Pipe Insulation	NAD
Bald-2-12-089	2nd Floor Main offices - Ceiling Tile	NAD
Bald-2-12-090	2nd Floor Main offices - Pipe Insulation	NAD
Bald-2-12-091	2nd Floor Main offices - Elbow (white)	NAD
Bald-2-12-092	2nd Floor Main offices - Elbow (black)	22 % Chrysotile
Bald-2-12-093	2nd Floor Main offices - Ceiling Tile	NAD
Bald-2-12-094	2nd Floor Mail Room - Linoleum	30 % Chrysotile
Bald-2-12-095	2nd Floor Mail Room - Ceiling tile	NAD
Bald-2-12-096	2nd Floor Janitor Room - Plaster wall	NAD
Bald -2-12-097	Stair well (main office) - Plaster wall	NAD

CONCLUSIONS

Asbestos was detected in thirty-three of the ninety-six samples that were collected throughout the plant. The asbestos containing building materials (ACBM) that were encountered in the Concept Center were two types of floor tile, mastic, pipe elbow insulation and roof materials. The ACBM that was found in the Concept Center was in relatively good condition, however the white 12" X 12" floor tiles showed areas of deterioration, cracking, and missing tiles with mastic exposed. These areas that are damaged should be repaired to prevent the release of asbestos fibers. The roof building materials were not tested per the request of the owner. Roofing materials commonly contain asbestos. The roof felt paper, flashing and coating tar often contain asbestos. Therefore, the roof must be assumed to contain asbestos until further testing is conducted.

The ACBM that was encountered in the Main Building was elbow, valve, tee and pipe insulation, three types of floor tile, mastic, linoleum, roof building materials and fire doors. The air cell pipe insulation that was encountered in the receiving room was in good condition. The elbows, valves, and tees (EVT) that were encountered throughout the plant varied in amount of damage. The EVTs ranged from 2 %, of the EVTs damaged per room, to 40 % damaged per room. The EVTs that were sampled contained 80 % - 85 % asbestos. The EVT's that are damaged should be quickly repaired to prevent any asbestos fibers being released into the air.

There were two areas of asbestos containing floor tile that were located under non-abestos-containing asbestos floor tile. The purchasing office and the lunch room (next to the first aid office) had floor tile that tested positive for asbestos under floor tile that tested negative for asbestos. The floor tile contained 2 % chrysotile asbestos. The floor tile was in good condition but should be periodically monitored for deterioration.

Tan floor tile samples were collected in the HVAC area in the Package and Assembly Department. These floor tiles tested positive for 10 % chrysotile asbestos. The tiles were in fair condition with some damage and missing tiles and exposed mastic. The same tiles were located in small areas on the main floor of the Package and Assembly Department. These tiles were severely damaged. There appears to have been tiles throughout the Package and Assembly department that had been removed at one time. There are areas of mastic that held down the tiles and the mastic was never removed. The mastic tested positive for asbestos, this mastic contains 15 % asbestos. There appears to be a high quantity of traffic in this area and the mastic is being worn from the cement floor. The mastic that is on the floor should be removed by a licensed asbestos contractor. A 9"x 9", brown and tan speckled floor tile was encountered in the Package and Assembly office area, entrance, first aid room and lunch room area. These tile contained 2 % chrysotile asbestos and the mastic contained 15 % chrysotile asbestos. These areas of floor tile were in good condition. If damage occurs to the floor tile, repairs should be made accordingly.

Asbestos containing linoleum was encountered in two areas. The first aid room, below the main offices, and the mail room contained the linoleum. There was also a small section (4' x 4') of linoleum in the office space area located on the second floor. The linoleum contained 25% - 30% chrysotile asbestos. There were no signs of damage or wear to the linoleum floor covering.

The roof materials that are on the Main building and the Concept Center building are to be assumed asbestos containing building materials. Roof flashing, felt paper, and coating tar often contain asbestos. These areas are must be assumed until further sampling can determine if asbestos is actually present in these building materials. There were three fire doors identified in the main building area. There were two doors located in the passage way between the Gift Base Stem Cell / Spindel Cell and the Coloring Department. One door was located in the Package and Assembly area entrance from the hall corridor. These fire doors have been known to contain asbestos containing materials. Until further sampling can determine if asbestos is present inside the doors, these areas must be assumed to contain asbestos.

During the inspection, we identified production machinery that may contain asbestos. Materials that commonly contain asbestos on these machines are gasketing and insulating materials. The following machines, due to their characteristics, were noted to possibly contain asbestos:

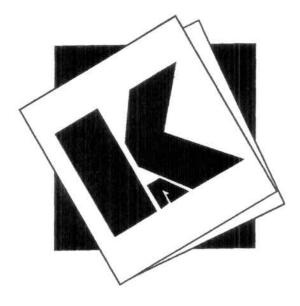
Department	Machine Number	Department	Machine Number
Polishing Dept.	891	Forging Dept.	1360
Polishing Dept.	890	Forging Dept.	1387
Forging Dept.	177	Old Laquer Dept.	Oven
Forging Dept.	508	Coloring Dept.	1341
Forging Dept.	5504, 5507	Laguer Dept.	946/947
Forging Dept.	5534	Laquer Dept.	865, 865A

We recommend one of two approaches to handling machines which may contain asbestos. These are either: 1) determine whether the materials are asbestos containing materials (ACM) and remove and replace all ACM. 2) periodically inspect the machines parts for damage and wear to any known or suspect ACM.

If any damage occurs to the ACBM, appropriate actions should be taken to repair or remove the damaged areas to prevent asbestos fibers from being released into the air. All repairs or removal work should be accomplished by a licensed asbestos contractor. If any removal of ACBM is conducted, AHERA regulations require that a certified air monitoring technician monitor the removal project. The air monitor will conduct air sampling to ensure that there have not been any asbestos fiber releases during the project.

Certified Asbestos Inspector:

Dean Druckenmiller License # 014444



LABORATORY REPORTS

7469 White Pine Road Richmond, Virginia 23237

Phone: (804) 275-4788 Fax: (804) 275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT:

Karl & Associates, Inc.

DATE:

22 FEB 1996

P.O. Box 645

Shillington, PA 19607

EHS PROJECT #:

02-96-1410

PROJECT:

96004

EHS SAMPLE#	CLIENT SAMPLE #/ LAB. GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	Bald-2.5-001/ White Fibrous	NAD	80% Fibrous Glass 20% Non-Fibrous
02	Bald-2.5-002/ White Org. Bound	5% Chrysotile 5% Total Asbestos	95% Non-Fibrous
03	Bald-2.5-003/ Black Org. Bound	10% Chrysotile 10% Total Asbestos	90% Non-Fibrous
04	Bald-2.5-004/ White Org. Bound	7% Chrysotile 7% Total Asbestos	93% Non-Fibrous
05	Bald-2.5-005/ Blue Org. Bound	NAD	3% Cellulose 97% Non-Fibrous
06	Bald-2.5-006/ Gray Fibrous	5% Chrysotile 5% Total Asbestos	5% Cellulose 60% Fibrous Glass 30% Non-Fibrous
07	Bald-2.5-007/ White Org. Bound	NAD	100% Non-Fibrous
08	Bald-2.5-008/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
09	Bald-2.5-009/ White/Brown Friable	NAD	10% Cellulose 90% Non-Fibrous
10	Bald-2.5-010/ Brown Organic	NAD .	2% Cellulose 98% Non-Fibrous
11	Bald-2.5-011/ Blue Ceramic Wool	NAD	98% Synthetic 2% Non-Fibrous
12	Bald-2.5-012/ Gray Cement.	NAD	2% Cellulose 98% Non-Fibrous
13	Bald-2.5-013/ Gray Fibrous	85% Chrysotile 85% Total Asbestos	15% Non-Fibrous
14	Bald-2.5-014/ Gray Fibrous	85% Chrysotile 85% Total Asbestos	15% Non-Fibrous

EHS PROJECT #: 02-96-1410

15		Bald-2.5-015/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
16		Bald-2.5-017/ White Fibrous	3% Chrysotile 3% Total Asbestos	2% Cellulose 40% Fibrous Glass 55% Non-Fibrous
17		Bald-2.8-018/ Gray Fibrous	90% Chrysotile 90% Total Asbestos	10% Non-Fibrous
18		Bald-2.8-019/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
19		Bald-2.8-020/ Brown Org. Bound	NAD	100% Non-Fibrous
20		Bald-2.8-021/ Brown Org. Bound	NAD	100% Non-Fibrous
21		Bald-2.8-022/ White Spongy	NAD	100% Non-Fibrous
22		Bald-2.8-023/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
23		Bald-2.8-024/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
24		Bald-2.8-025/ White Org. Bound	NAD	100% Non-Fibrous
25		Bald-2.8-026/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
26		Bald-2.8-027/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
27		Bald-2.8-028/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
28		Bald-2.8-029/ Gray Powdery	NAD	35% Fibrous Glass 65% Non-Fibrous
29	6	Bald-2.8-030/ Gray Fibrous	90% Chrysotile 90% Total Asbestos	10% Non-Fibrous
30		Bald-2.8-031/ White Powdery	NAD	30% Fibrous Glass 70% Non-Fibrous
31		Bald-2.8-032/ White Powdery	85% Chrysotile 85% Total Asbestos	15% Non-Fibrous
32		Bald-2.8-033/ White Powdery	NAD	25% Fibrous Glass 75% Non-Fibrous

EHS PROJECT #: 02-96-1410

33	Bald-2.8-034/ White Powdery	NAD	5% Cellulose 40% Fibrous Glass 55% Non-Fibrous
34	Bald-2.8-035/ White Friable	NAD	100% Non-Fibrous
35	Bald-2.8-036/ Gray Powdery	NAD	30% Fibrous Glass 70% Non-Fibrous
36	Bald-2.8-037/ Blue Org. Bound	NAD	100% Non-Fibrous
37	Bald-2.8-038/ Brown Org. Bound	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
38	Bald-2.8-039/ White Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
39	Bald-2.8-040/ White Fibrous	NAD	85% Cellulose 15% Non-Fibrous
40	Bald-2.8-041/ Gray Fibers	NAD	5% Cellulose 45% Fibrous Glass 50% Non-Fibrous
41	Bald-2.8-042/ Gray Fibrous	85% Chrysotile 85% Total Asbestos	15% Non-Fibrous
42	Bald-2.8-043/ Gray Fibrous	15% Chrysotile 15% Total Asbestos	70% Cellulose 15% Non-Fibrous
43	Bald-2.8-044/ Gray Powder	NAD	40% Fibrous Glass 60% Non-Fibrous
44	Bald-2.8-045/ Gray Powder Fibrous	NAD	10% Cellulose 30% Fibrous Glass 60% Non-Fibrous
45	Bald-2.8-046/ Gray Fibrous	NAD	60% Fibrous Glass 40% Non-Fibrous
46	Bald-2.8-047/ Gray Powder	NAD	5% Cellulose 30% Fibrous Glass 65% Non-Fibrous
47	Bald-2.8-048/ Gray Powder	2% Chrysotile 2% Total Asbestos	40% Fibrous Glass 58% Non-Fibrous
48	Bald-2.8-049/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
49	Bald-2.8-050/ Gray Powder	NAD	40% Fibrous Glass 60% Non-Fibrous

EHS PROJECT #: 02-96-1410

50	Bald-2.8-051/ Gray Fibrous	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
51	Bald-2.8-052/ White/Brown Powder	NAD	100% Non-Fibrous
52	Bald-2.8-053/ Beige Org. Bound	NAD	100% Non-Fibrous
53	Bald-2.8-054/ Brown Org. Bound	3% Chrysotile 3% Total Asbestos	97% Non-Fibrous
54	Bald-2.8-055/ Yellow Fibrous	NAD	97% Cellulose 3% Non-Fibrous
55	Bald-2.9-056/ White Powder	NAD	2% Cellulose 30% Fibrous Glass 68% Non-Fibrous
56	Bald-2.9-057/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
57	Bald-2.9-058/ White Powder	NAD	60% Fibrous Glass 40% Non-Fibrous
58	Bald-2.9-059/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
59	Bald-2.9-060/ Brown Org. Bound	NAD	100% Non-Fibrous
60	Bald-2.9-061/ White Fibrous	NAD	70% Fibrous Glass 30% Non-Fibrous
61	Bald-2.9-062/ Brown/Red Org. Bound	NAD	15% Cellulose 85% Non-Fibrous
62	Bald-2.9-063/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
63	Bald-2.9-064/ Gray Powder	NAD	50% Fibrous Glass 50% Non-Fibrous
64	Bald-2.9-065/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
65	Bald-2.9-066/ Brown Org. Bound	10% Chrysotile 10% Total Asbestos	90% Non-Fibrous
66	Bald-2.9-067/ Black Organic	20% Chrysotile 20% Total Asbestos	80% Non-Fibrous
67	Bald-2.9-068/ Brown Org. Bound	NAD	100% Non-Fibrous

EHS PROJECT #: 02-96-1410

68	Bald-2.9-069/ Black Org. Bound	15% Chrysotile 15% Total Asbestos	5% Cellulose 80% Non-Fibrous
69	Bald-2.9-070/ Brown Org. Bound	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
70	Bald-2.9-071/ Black Org. Bound	15% Chrysotile 15% Total Asbestos	5% Cellulose 80% Non-Fibrous
71	Bald-2.9-072/ White Coat; Brown Coat	NAD	2% Cellulose 98% Non-Fibrous
72	Bald-2.9-073/ Gray Fibrous	NAD	95% Cellulose 5% Non-Fibrous
73	Bald-2.9-074/ White/Brown Friable	NAD	25% Cellulose 75% Non-Fibrous
74	Bald-2.9-075/ Brown Org. Bound	3% Chrysotile 3% Total Asbestos	97% Non-Fibrous
75	Bald-2.9-076/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
76	Bald-2.9-077/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
77	Bald-2.9-078/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
78	Bald-2.9-079/ Yellow Fibrous	NAD	10% Cellulose 85% Fibrous Glass 5% Non-Fibrous
79	Bald-2.9-080/ Blue Bound	NAD	100% Non-Fibrous
80	Bald-2.9-081/ Brown Organic	NAD	5% Cellulose 95% Non-Fibrous
81	Bald-2.9-082/ Gray/White Org. Bound	25% Chrysotile 25% Total Asbestos	10% Cellulose 65% Non-Fibrous
82	Bald-2.9-083/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
83	Bald-2.9-084/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
84	Bald-2.12-085/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous
85	Bald-2.12-086/ White/Brown Friable	NAD	30% Cellulose 70% Non-Fibrous

ENVIRONM EHS PROJECT #:	THE RESERVE TO SHARE THE PARTY OF THE PARTY	S SERVICES, INC 1: 96004				
86	Bald-2.12-087/ Gray Powder	NAD	35% Fibrous Glass 65% Non-Fibrous			
87	Bald-2.12-088/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous			
88	Bald-2.12-089/ White Fibrous	NAD	50% Cellulose 25% Fibrous Glass 25% Non-Fibrous			
89	Bald-2.12-090/ Yellow Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous			
90	Bald-2.12-091/ Gray Powder	NAD	60% Fibrous Glass 40% Non-Fibrous			
91	Bald-2-12-092/ Black Tar Fibrous	22% Chrysotile 22% Total Asbestos	5% Cellulose 10% Fibrous Glass 63% Non-Fibrous			
92	Bald-2-12-093/ Brown Fibrous	NAD	90% Cellulose 10% Non-Fibrous			
93	Bald-2.12-094/ Brown Org. Bound	30% Chrysotile 30% Total Asbestos	10% Cellulose 60% Non-Fibrous			
94	Bald-2.12-095/ Brown Fibrous	NAD	95% Fibrous Glass 5% Non-Fibrous			
95	Bald-2.12-096/ White Powder Granular	NAD	2% Cellulose 98% Non-Fibrous			
96	Bald-2.13-097/ White/Brown Friable	NAD	100% Non-Fibrous			
Method:	Polarized Light Microscop	y, EPA Method 600/R-93/116				
C+	Standards The second OSYM Standards Company					

Standards:

The current OSHA Standard is one percent (1%) by weight.

Analyst:

Fuxing Zhou

Reviewed by:

NVLAP ACCREDITATION #1882

AIHA ACCREDITATION #412

NOTE: Results represent the analysis by Environmental Hazards Services, Inc., of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, Inc.

EHS PROJECT #: 02-96-1410

PROJECT: 96004

Environmental Hazards Services, Inc. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy ((TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

NAD = No Asbestos Detected SCF = Suspected Ceramic Fibers SAMPLE TRANSMITTAL RECORD / CHAIN OF CUSTODY RECORD 2.96.1410 EAGLE NOUSTRAL HYGIENE AS POINT OF CONTACT: REPORT NO .: Baldwin Hardware PHONE NO.: LAB NO.: T I.D. / JOB NO. / PURCHASE ORDER NO.: FIELD DATA SHEET ATTACHED 96004

DATE & TIME RESULTS REQUIRED / SPECIAL INSTRUCTIONS / COMMENTS: YO MO TOTAL NO. OF SAMPLES: PRIORITY CODE: FIELD SAMPLE NO .: ANALYTE SAMPLE TYPE ANALYSIS REQUESTED DESCRIPTION RESULTS Bald-2-5-001 Ceiling Tile Bulk PCM Flo Tile -002 Mastic -003 Flr Tile -004 Flo Tile -005 Elbow-Thernal -006 Flr Tile -007 Ceiling Tile -008 -009 Tile Grout. -010 Bald-25-011 Oven Insulation Oven Door moterial -012 Elb. - Thermal -013 Elb-Therma -014 -015 -016 Elb- Therm -017 Elb - There -012 COLLECTED BY: RECEIVED BY CHAIN OF CUSTODY INITIATED BY: TIME RECEIVED BY: SOBHITTED TO LAB BY: DATE TIME RECEIVED AT LAB BY: DGGED BY: PREPARED BY: ANALYZED BY: DATA VALIDATED BY: RUSH REPORT BY: DATE/TIME POST-LOGGED BY:

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REPORT APPROVED BY:

DATA PROCESSED BY:

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-034	$\bot \bot$	1	Elb - Hermal							
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SAMPLE TRANSMITTAL RECORD / CHAIN OF CUSTODY RECORD

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-050	$\bot \bot$		Valve - Hermal	í			
-051			Elb- Thermal				
-052			Planter Chely- So	race			
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SAMPLE TRANSMITTAL RECORD / CHAIN OF CUSTODY RECORD

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-065	++	-	Pipe Insulation - thermal			
-Olele	++		Flr. Tile		-	
-067	+/-	+	Mastic			
- Ole8	++-	+	Flr. Tile			
-069		1	Mastic			
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-071	1	1	Mastic			163
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SAMPLE TRANSMITTAL RECORD / CHAIN OF CUSTODY RECORD

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-092			Elb- (White much)	92		
-093			Cieling Tile		.	
-094			Lindeum	35.5		
-095			CielingTile	79		
-096			Plaster Wall - Surface			
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OPERATIONS AND MAINTENANCE PROGRAM



KARL & ASSOCIATES INC. ASBESTOS MANAGEMENT PLAN

OPERATIONS AND MAINTENANCE PROGRAMS

Recent changes in the OSHA regulations will make it more difficult and costly for facilities to perform in house operations and maintenance programs for their asbestos.

In the past, maintenance personnel were permitted to under go 'awareness training'. This training would allow them to do such tasks as removing minor amounts of asbestos if it was part of a maintenance job (ie: repairing a leaking pipe). It also permitted them to clean up spills etc. and to take action during fiber release episodes. The new OSHA laws no longer recognize awareness training as being sufficient and now require the full 40 hour asbestos worker training. In addition Pennsylvania also requires that all abatement be performed by licensed abatement workers and that all abatement jobs be designed by a certified project designer.

For a facility to perform in house operations and maintenance activities they would in effect have to become a licensed abatement contractor. Workers would have to under go physicals, respirator training and at least one supervisor is required with CPR training. After abatement the waste must be properly disposed of at a state licensed landfill and a state licensed transported must be used to haul it. Most landfills have a minimum load requirement and as disposal costs are high the minimum disposal fee can often exceed the cost of minor abatement jobs. Stockpiling waste is prohibited.

All these training and licensing requirements underscore the liability issue facing facility owners. It would be necessary to purchase additional and specialized insurance. Abatement workers are skilled labor and as such command significantly higher salaries. With the ability to earn much higher pay employee turnover may result requiring the expensive training of new workers. With all these factors it is recommended that the facility contract with a local asbestos abatement contractor to perform all asbestos related work. The selected contractor should have the ability to not only respond quickly but to respond to emergency situations that may occur during off hours and on weekends. Even encapsulation and clean up are now considered activities that must be performed by licensed workers.

The enclosed forms are for record keeping. Everything that involves asbestos should be recorded. More importantly, the response to emergency situations must also be recorded.



ASBESTOS MANAGEMENT PLAN

OPERATIONS AND MAINTENANCE ACTIVITIES

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ASBESTOS MANAGEMENT PLAN

OPERATIONS AND MAINTENANCE ACTIVITIES

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ASBESTOS MANAGEMENT PLAN

OPERATIONS AND MAINTENANCE ACTIVITIES

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ASBESTOS MANAGEMENT PLAN

HOMOGENEOUS AREA

Due to some areas of the facility being constructed at the same time we are able to group certain building materials together into one homogeneous identification. A minimum number of samples must be taken before the materials in the homogeneous are can be classified. Specific guidelines were followed for the number of samples required and the limitations of assumption. *Roofing can not normally be considered a homogeneous area however all roofing materials should be assumed as asbestos containing.

The fire doors would also require distructive sampling, asbestos is common in fire doors of this type and age and therefore they should also be assumed to contain asbestos.

Asbestos Inspection

Homogeneous Area

At the Baldwin Hardware Company plant in Reading, Karl and Associates personnel identified 5 types of building materials in the Concept Center and 9 types of building materials in the Main Building that we could classify together into definitive areas:

CONCEPT CENTER

BUILDING MATERIAL	HOMOGENEOUS IDENTIFICATION
EVT (elbow, valve, tee)	001
Mastic	002
9" X 9" Flr. Tile - White	003
12" X 12 Flr. Tile - White	004
Roof Building Materials	005

MAIN BUILDING

BUILDING MATERIAL	HOMOGENEOUS IDENTIFICATION
Pipe Insulation	001
EVT	002
Floor Tile - Brown/Orange	003
9" X 9" Flr. Tile - Tan	004
Mastic	005
9"X 9" Flr. Tile - Tan w/ brown specs	006
Linoleum	007
Roof Building Materials	008
Fire Doors	009



ASBESTOS MANAGEMENT PLAN PERIODIC SURVEILLANCE/REINSPECTIONS

A key feature of the management plan program is reinspection of all ACM in the buildings. Combined with ongoing reports or changes in the condition of the ACM made by service workers, the reinspection will insure that any damage or deterioration of the ACM will be detected and corrective action taken. Reinspections will be conducted every six months and will be performed by a knowledgeable individual. Every three years a reinspection will be conducted by an accredited Building Inspector. Reinspections shall include the following:

Visual reinspection and reassessment of all friable known or assumed ACBM.

Visual inspection of materials that were previously considered non-friable ACBM to determine whether the material has become friable since the last inspection.

Identify homogeneous areas with material that has become friable since the last inspection.

Reassessment of the condition of friable known or assumed ACBM previously identified.

A written report of all reinspection activities shall be prepared and included in the facility's asbestos management plan within 30 days.

The following shall be included in this report:

- Date of reinspection
- b. Name and signature of inspector
- Any and all changes in the condition of known or assumed ACBM
- The name, signature, state of accreditation and accreditation number of each inspector who collected samples

SURFACING MATERIAL

For surfacing materials, the person performing the inspection will look for incidental contact or water damage, evidence of air stream effects, and visible debris.

THERMAL SYSTEM INSULATION

For thermal system insulation, the inspector will look for water damage, incidental contact damage, debris from insulation on the floor and insure that the material has retained its integrity.

MISCELLANEOUS MATERIALS

Periodic surveillance for miscellaneous material will include an examination for contact damage or water damage.



ASBESTOS MANAGEMENT PLAN

PERIODIC SURVEILLANCE / REINSPECTION RECORDS

Date:	
Name of Inspector:	
Accreditation:	
AREA / MATERIAL INSPECTED	CHANGE IN MATERIAL CONDITION
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KARL & ASSOCIATES INC. ASBESTOS MANAGEMENT PLAN

CHAIN OF COMMAND

Owners are ultimately responsible for all asbestos related problems in their facility. An asbestos program manager should be appointed to direct all asbestos related activities, including emergency response. The asbestos program manager should communicate directly with the plant manager and oversee the development of the asbestos control program. The asbestos program manager needs to become familiar with all the (ACM) asbestos containing materials, the potential for building contamination with airborne asbestos, the health risks to building occupants, and the options for controlling or maintaining ACBM.

The asbestos program manager needs a good general understanding of all the issues in order to review the technical tasks and judge whether they are being performed properly. Often, building owners, school administrators and facility managers will use the services of a qualified consultant.

The asbestos program manager should set up emergency response teams for each shift. Procedures should be in place on how to deal with fiber release episodes to keep all contamination down to a minimum. All asbestos response equipment and supplies should be in a designated location. A fast emergency response reduces fiber release to a minimum.

A designated person should be available to answer employee questions. The maintenance supervisor should report directly to the designated person in all matters concerning any activities with the potential to disturb asbestos containing building materials.



ASBESTOS MANAGEMENT PLAN

CHAIN OF COMMAND

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ASBESTOS MANAGEMENT PLAN

PLAN TO INFORM

Specific requirements are included within the AHERA regulations that require facility owners or managers to inform employees, occupants or outside contractors of the presence of, or of activity involving asbestos in the facility. In recent years there has been a push to expand the full AHERA regulations to the privet sector but all efforts have failed. As the AHERA regulations do not apply to your facility its requirements should only be used as a guideline and do not have to be strictly followed. The prudent facility owner will however follow the guidelines closely and keeping all such records in the management plan.

It is strongly recommended that any outside contractor performing work at the facility be given, and sign a form indicating, they understand that asbestos is present in the building and must not be disturbed. This will place the liability on the outside contractor should a fiber release incident occur.



ASBESTOS MANAGEMENT PLAN PLAN TO INFORM

	8 B	Building						
		scribe the steps taken to inform maintenance personnel, building occupants and/or legal guardians of children, reguarding the following:						
	a) Inspections and reinspections b) Responce actions in their building c) Post responce action activities d) Periodic inspections e) Survrillance activities planned							
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ASBESTOS MANAGEMENT PLAN

FIBER RELEASE EPISODES

The fiber release episode log must be filled out whenever a fiber release incident occurs.

Fiber release episodes normally will occur due to physical damage, water damage or disturbance during renovation or demolition activities. Record all episodes and maintain records in the management plan. It is equally important to record the response action to the incident.

Fiber release episodes may be categorized into Minor and Major incidents.

A Minor release is said to occur if three feet or less of the material was disturbed. Major releases would then be disturbance of greater than three feet of material.

Regardless of the size all disturbances must be treated promptly to localize the potential impact and limit the spread of contamination. Little can be done by the untrained or unlicensed worker however access to the entire area should be immediately restricted. All HVAC or air handling units that blow into or receive return air from the area should be shut down. From a safe distance the entire area should be thoroughly wetted with a wetting agent. (taking care no to cause an electrical hazard) Maintain the area in a wet state to reduce fiber levels until trained personal can remediate the spill.



ASBESTOS MANAGEMENT PLAN

FIBER RELEASE EPISODE LOG

ALL MAJOR OR MINOR RELEASES MUST BE RECORDED

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